



## Northwest Training Range Complex Final Environmental Impact Statement/ Overseas Environmental Impact Statement

# Volume 2 EIS/OEIS

### September 2010

Commander, U.S. Pacific Fleet c/o Pacific Fleet Environmental Office 1101 Tautog Circle Silverdale, WA 98315

## Appendix A

Federal Register Notices

#### **DEPARTMENT OF DEFENSE**

#### Department of the Navy

Notice of Intent To Prepare an Environmental Impact Statement/ Overseas Environmental Impact Statement for Navy Training Operations in the Northwest Training Range Complex and Notice of Public Scoping Meetings

**AGENCY:** Department of the Navy, DoD. **ACTION:** Notice.

**SUMMARY:** Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as implementeď by the Council on Environmental Quality Regulations (40 CFR Parts 1500–1508), and Executive Order 12114, the Department of the Navy (Navy) announces its intent to prepare an Environmental Impact Statement (EIS)/ Overseas EIS to evaluate the potential environmental effects of maintaining Fleet readiness through the use of the Northwest Training Range Complex (NWTRC) to support current, emerging, and future training activities. The proposed action serves to implement range enhancements to upgrade and modernize range capabilities within the NWTRC thereby ensuring critical Fleet requirements are met. The Navy will invite the U.S. Fish and Wildlife Service and National Marine Fisheries Service to be cooperating agencies in preparation of this EIS/OEIS.

DATES AND ADDRESSES: Five public scoping meetings will be held in Washington, Oregon and California to receive oral and written comments on environmental concerns that should be addressed in the EIS/OEIS. Public scoping meetings will be held at the following dates, times and locations: September 10, 2007, from 6 p.m. to 9 p.m. at Coachman Inn, 32959 State Route 20, Oak Harbor, Washington, September 11, 2007, from 6 p.m. to 9 p.m., at Pacific Beach Fire Hall, 4586 State Route 109, Pacific Beach, Washington, September 12, 2007, from 6 p.m. to 9 p.m., at Grays Harbor College Cafeteria, 1620 Edward P. Smith Drive, Aberdeen, Washington, September 13, 2007, from 6 p.m. to 9 p.m., at Spouting Horn Restaurant, 110 Southeast Highway 101, Depoe Bay, Oregon, and September 15, 2007, from 6 p.m. to 9 p.m., at Eureka's Women's Club, 1531 J Street, Eureka, California.

Each of the five scoping meetings will consist of an informal, open house session with information stations staffed by Navy representatives. Details of the meeting locations and time will be announced in local newspapers.

Additional information concerning meeting times will be available on the EIS/OEIS web page located at: http://www.NWTRangeComplexEIS.com.

#### FOR FURTHER INFORMATION CONTACT:

Kimberly Kler, Naval Facilities Engineering Command, Northwest, Attention: NWTRC EIS/OEIS, 1101 Tautog Circle Suite 203, Silverdale, Washington, 98315–1101.

SUPPLEMENTARY INFORMATION: The NWTRC consists of airspace, surface operating areas, and land range facilities in the Pacific Northwest. Components of the NWTRC encompass 126,630 nm<sup>2</sup> of surface/subsurface ocean operating area, 33,997 nm<sup>2</sup> of special use airspace, and 22 nm<sup>2</sup> of restricted airspace. The EIS/ OEIS study area lies within the NWTRC, and encompasses surface and subsurface ocean operating areas, land training areas and special use airspace in Washington, and over-ocean special use airspace offshore of Washington, Oregon and northern California. These ranges and operating areas are used to conduct training involving military hardware, personnel, tactics, munitions, explosives, and electronic combat systems. The NWTRC serves as a backyard range for those units homeported in the Pacific Northwest area including those aviation, surface ship, submarine, and Explosive Ordnance Disposal units homeported at Naval Air Station Whidbey Island, Naval Station Everett, Naval Base Kitsap—Bremerton, Naval Base Kitsap— Bangor, and Puget Sound Naval Shipyard.

The purpose of the Proposed Action is to: (1) Achieve and maintain Fleet readiness using the NWTRC to support and conduct current, emerging, and future training activities and research, development, test, and evaluation (RDT&E) events (primarily unmanned aerial vehicles); (2) expand warfare missions supported by the NWTRC, consistent with the requirements of the Fleet Readiness Training Plan (FRTP) and other transformation initiatives; and (3) upgrade and modernize existing range capabilities to enhance and sustain Navy training and RDT&E.

The need for the Proposed Action is to: (1) Maintain current levels of military readiness by training in the NWTRC; (2) accommodate future increases in operational training tempo in the NWTRC and support the rapid deployment of naval units or strike groups; (3) achieve and sustain readiness of ships, submarines, and aviation squadrons using the NWTRC so that they can quickly surge significant combat power in the event of a national crisis or contingency operation and

consistent with the FRTP; (4) support the acquisition and implementation of advance military technology into the Fleet; (5) identify shortfalls in range capabilities, particularly training infrastructure and instrumentation, and address through range investments and enhancements; and (6) maintain the long-term viability of the NWTRC while protecting human health and the environment and enhancing the quality and communication capability and safety of the range complex.

The No Action Alternative is the continuation of training and RDT&E. Alternative 1 consists of an increase in the number of training activities from baseline levels and force structure changes associated with the introduction of new weapon systems, vessels, and aircraft into the Fleet. Alternative 2 consists of all elements of Alternative 1. In addition, Alternative 2 includes an increase in the number of training activities over Alternative 1 levels and implementation of range enhancements.

Environmental issues that will be addressed in the EIS/OEIS, as applicable, include but are not limited to: air quality; airspace; biological resources, including threatened and endangered species; cultural resources; geology and soils; hazardous materials and waste; health and safety; land use; noise; socioeconomics; transportation; and water resources.

The Navy is initiating the scoping process to identify community concerns and local issues that will be addressed in the EIS/OEIS. Federal agencies, state agencies, and local agencies, Native American Indian Tribes and Nations, the public, and interested persons are encouraged to provide oral and/or written comments to the Navy to identify specific issues or topics of environmental concern that the commenter believes the Navy should consider. All comments, written or provided orally at the scoping meetings, will receive the same consideration during EIS/OEIS preparation. Written comments must be postmarked no later than September 29, 2007, and should be mailed to: Naval Facilities Engineering Command, Northwest, 1101 Tautog Circle, Suite 203, Silverdale, Washington, 98315-1101, Attention: Ms. Kimberly Kler—NWTRC EIS/OEIS.

Dated: July 25, 2007.

#### M.C. Holley,

Lieutenant Commander, Office of the Judge Advocate General, U.S. Navy, Administrative Law Division, Alternate Federal Register Liaison Officer.

[FR Doc. E7–14784 Filed 7–30–07; 8:45 am] **BILLING CODE 3810-FF-P** 

#### **ENVIRONMENTAL PROTECTION AGENCY**

[ER-FRL-8588-8]

#### **Environmental Impacts Statements;** Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564–7167 or http://www.epa.gov/ compliance/nepa/.

#### Weekly Receipt of Environmental **Impact Statements Filed 12/15/2008** Through 12/19/2008 Pursuant to 40 CFR 1506.9

Due to the closing of Executive Departments and Agencies of the Federal Government on 12/26/2008, this Notice of Availability is being published on 12/29/2008. Comment and Wait Periods will be calculated from 12/29/ 2008

EIS No. 20080527, Draft EIS, AFS, CA, Modoc National Forest Motorized Travel Management Plan, Implementation, National Forest Transportation System (NFTS), Modoc, Lassen and Siskiyou Counties, CA, Comment Period Ends: 02/11/2009, Contact: Kathleen Borovac 530-233-8754.

EIS No. 20080528, Draft EIS, USN, 00, Northwest Training Range Complex (NWTRC), To Support and Conduct Current, Emerging, and Future Training and Research, Development, Test and Evaluation (RDT&E) Activities, WA, OR and CA, Comment Period Ends: 02/11/2009, Contact: Kimberly Kler 360-396-0927.

EIS No. 20080529, Draft EIS, FHW, CT, North Hillside Road Extension on the University of Connecticut Storrs Campus, Hunting Lodge Road, U.S. Army COE Section 404 Permit, in the town Mansfield, CT, Comment Period Ends: 02/13/2009, Contact: Bradley D. Keager 860-659-6703 Ext 3009.

EIS No. 20080530, Draft EIS, MMS, AK, Beaufort Sea and Chukchi Sea Planning Areas, Proposals for Oil and Gas Lease Sales 209, 212, 217, and 221, Offshore Marine Environment, Beaufort Sea Outer Continental Shelf, and North Slope Borough of Alaska, Comment Period Ends: 03/16/2009, Contact: Keith Gordon 907-334-5265.

EIS No. 20080531, Draft EIS, USN, WA, Naval Base Kitsap—Bangor, Construct and Operate a Swimmer Interdiction Security System (SISS), Silverdatle Kitsap County, WA, Comment Period Ends: 03/02/2009, Contact: Shannon Kasa 619-553-3889.

EIS No. 20080532, Draft EIS, AFS, CO, Vail Ski Area's 2007 Improvement Project, Addressing Issues Related to the Lift and Terrain Network, Skier Circulation, Snowmaking Coverage, Guest Services Facilities, Special-Use-Permit, Eagle/Holy Cross Ranger District, White River National Forest, Eagle County, CO, Comment Period Ends: 02/11/2009, Contact: Roger Poirier 970-945-3266.

EIS No. 20080533, Draft EIS, AFS, CA, Plumas National Forest Public Motorized Travel Management, Implementation, Plumas National Forest, Plumas County, CA, Comment Period Ends: 02/11/2009, Contact: Jane Beaulieu 530-283-7742.

EIS No. 20080534, Final EIS, IBR, WA, Yakima River Basin Water Storage Feasibility Study, Create Additional Water Storage, Benton, Yakima, Kittitas Counties, WA, Wait Period Ends: 01/27/2009, Contact: David Kaumheimer 509-575-5848 Ext. 612.

#### **Amended Notices**

EIS No. 20070327, Draft EIS, FTA, TX, Withdrawn—Denton to Carrollton Regional Rail Corridor Project, Transportation Improvements between Downtown Denton and the Dallas Area Rapid (DART) System, Right-of-Way Grant, Denton and Dallas Counties, TX, Contact: Robert C. Patrick 817-978-0550. Revision to FR Notice Published 08/03/2007: Officially Withdrawn by the Filing Agency.

EIS No. 20080480, Draft EIS, USN, NJ, Laurelwood Housing Area, Access at Naval Weapons Station Earle, Lease Agreement, Monmouth County, NJ, Comment Period Ends: 01/23/2009, Contact: Kim Joyner-Barty 757-322-8473. Revision to FR Notice Published 11/28/2008: Extending Comment Period from 01/12/2009 to 01/23/ 2009.

Dated: December 22, 2008.

#### Clifford Rader,

 $Environmental\ Protection\ Specialist,\ Of fice$ of Federal Activities.

[FR Doc. E8-30908 Filed 12-24-08; 8:45 am] BILLING CODE 6560-50-P

#### **ENVIRONMENTAL PROTECTION AGENCY**

[FRL-8757-3, EPA-HQ-OW-2008-0055]

**Final National Pollutant Discharge Elimination System (NPDES) General** Permit for Discharges Incidental to the Normal Operation of a Vessel

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of availability.

**SUMMARY:** EPA Regions 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 are finalizing an NPDES

Vessel General Permit (VGP) to cover discharges incidental to the normal operation of vessels. This action is in response to a District Court ruling that vacates, as of December 19, 2008, a longstanding EPA regulation that excludes discharges incidental to the normal operation of a vessel from the need to obtain an NPDES permit. As of December 19, 2008, discharges incidental to the normal operation of a vessel that had formerly been exempted from NPDES permitting by the regulation will be subject to the prohibition in CWA Section 301(a) against the discharge of pollutants without a permit.

EPA solicited information and data on discharges incidental to normal vessel operations to assist in developing two NPDES general permits in a Federal **Register** Notice published June 21, 2007 (72 FR 32421). The majority of information and data in response to that notice came from seven different groups: Individual citizens, commercial fishing representatives, commercial shipping groups, environmental or outdoor recreation groups, the oil and gas industry, recreational boatingrelated businesses, and state governments. EPA considered all the information and data received along with other publicly available information in developing two proposed

vessel permits.

EPA published the two proposed permits and accompanying fact sheets for public comment on June 17, 2008 (73 FR 34296). As proposed, the VGP would have covered all commercial and non-recreational vessels and those recreational vessels longer or equal to 79 feet, and the proposed RGP would have covered recreational vessels less than 79 feet in length. However, after the permits were proposed, Congress enacted two new laws that impact the universe of vessels covered under today's permit. On July 29, 2008, Senate bill S. 2766 ("the Clean Boating Act of 2008") was signed into law (Pub. L. 110-288). This law provides that recreational vessels shall not be subject to the requirement to obtain an NPDES permit to authorize discharges incidental to their normal operation. As a result of this legislation, EPA is not finalizing the proposed recreational vessel NPDES permit and has also modified the VGP, which included those recreational vessel over 79 feet, to eliminate that coverage. On July 31, 2008, Senate bill S. 3298 was signed into law (Pub. L. 110-299). This law generally imposes a two-year moratorium during which time neither EPA nor states can require NPDES permits for discharges (except ballast

Housing Area EIS Project Manager, Code EV21 Laurelwood PM, 6506 Hampton Boulevard, LRA Building A, Norfolk, VA 23508; http:// www.laurelwoodeis.com.

**SUPPLEMENTARY INFORMATION: Comments** on the Draft EIS should be mailed to Naval Facilities Engineering Command (NAVFAC) Atlantic, Attn: Laurelwood Housing Area EIS Project Manager, Code EV21 Laurelwood PM, 6506 Hampton Boulevard, LRA Building A, Norfolk, VA 23508. Comments can also be submitted via the project Web site: http://www.laurelwoodeis.com. All written comments postmarked or submitted to the project Web site by January 23, 2009, will become a part of the official public record and will be responded to in the Final EIS. An electronic copy of the Draft EIS, as well as further information on the proposed action, is available on the project Web site: http://www.laurelwoodeis.com.

Dated: December 19, 2008.

#### T.M. Cruz,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E8–30937 Filed 12–29–08; 8:45 am] BILLING CODE 3810-FF-P

#### DEPARTMENT OF DEFENSE

#### **Department of the Navy**

Notice of Public Hearings for the Draft Environmental Impact Statement/ Overseas Environmental Impact Statement for the Northwest Training Range Complex

**AGENCY:** Department of the Navy, DoD. **ACTION:** Notice.

**SUMMARY:** Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA), the Council on **Environmental Quality Regulations for** implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations Parts 1500-1508), and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, the Department of the Navy (Navy) has prepared and filed with the U.S. Environmental Protection Agency a Draft Environmental Impact Statement/ Overseas Environmental Impact Statement (EIS/OEIS) for public release on December 29, 2008. The National Marine Fisheries Service (NMFS) is a Cooperating Agency for the EIS/OEIS.

The Draft EIS/OEIS evaluates the potential environmental effects of maintaining Fleet readiness through the use of the Northwest Training Range Complex (NWTRC) to support current,

emerging, and future training activities. The proposed action serves to implement range enhancements to upgrade and modernize range capabilities within the NWTRC, thereby ensuring critical Fleet requirements are met. A Notice of Intent for this Draft EIS/OEIS was published in the **Federal Register** on July 31, 2007 (72 FR 41712).

The Navy will conduct five public hearings to receive oral and written comments on the Draft EIS/OEIS. Federal agencies, State agencies, and local agencies and interested individuals are invited to be present or represented at the public hearings. This notice announces the dates and locations of the public hearings for this Draft EIS/OEIS.

An open house session will precede the scheduled public hearing at each of the locations listed below, and will allow individuals to review the information presented in the Draft EIS/OEIS. Navy representatives will be available during the open house sessions to clarify information related to the Draft EIS/OEIS.

DATES AND ADDRESSES: Five public scoping meetings will be held in Washington, Oregon, and California to receive oral and written comments on the Draft EIS/OEIS. All meetings will start with an open house session from 5 p.m. to 7 p.m., followed by a presentation and formal public comment period from 7 p.m. to 8:30 p.m. Public hearings will be held on the following dates and at the following locations:

- 1. Tuesday, January 27, 2009, at Oak Harbor School District Office, ASC Board Room, 350 S. Oak Harbor Street, Oak Harbor, Washington;
- 2. Wednesday, January 28, 2009, at Pacific Beach Fire Hall, 4586 State Route 109, Pacific Beach, Washington;
- 3. Thursday, January 29, 2009, at Grays Harbor College Cafeteria, 1620 Edward P. Smith Drive, Aberdeen, Washington;
- 4. Friday, January 30, 2009, at Hatfield Marine Science Center, 2030 SE Marine Science Drive, Newport, Oregon;
- 5. Monday, February 2, 2009, at Eureka Women's Club, 1531 J Street, Eureka, California.

FOR FURTHER INFORMATION CONTACT: Mrs. Kimberly Kler, Naval Facilities Engineering Command Northwest, Attention: NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, Washington 98315–1101; or http://www.NWTRangeComplexEIS.com.

**SUPPLEMENTARY INFORMATION:** The NWTRC consists of airspace, surface operating areas, and land range facilities in the Pacific Northwest. Components of

the NWTRC encompass 122,400 nm<sup>2</sup> of surface/subsurface ocean operating area, 46,048 nm<sup>2</sup> of special use airspace, and 875 acres of land. The EIS/OEIS Study Area lies within the NWTRC, and encompasses surface and subsurface ocean operating areas, land training areas, and special use airspace in Washington, and over-ocean special use airspace offshore of Washington, Oregon, and northern California. These ranges and operating areas are used to conduct training involving military hardware, personnel, tactics, munitions, explosives, and electronic combat systems. The NWTRC serves as a backvard range for those units homeported in the Pacific Northwest area including those aviation, surface ship, submarine, and Explosive Ordnance Disposal units homeported at Naval Air Station Whidbey Island, Naval Station Everett, Naval Base Kitsap-Bremerton, Naval Base Kitsap-Bangor, and Puget Sound Naval Shipyard.

The purpose of the Proposed Action is to: (1) Achieve and maintain Fleet readiness using the NWTRC to support and conduct current, emerging, and future training activities and research, development, test, and evaluation (RDT&E) events (primarily unmanned aerial vehicles); (2) expand warfare missions supported by the NWTRC consistent with the requirements of the Fleet Response Training Plan (FRTP) and other transformation initiatives; and (3) upgrade and modernize existing range capabilities to enhance and sustain Navy training and RDT&E.

The need for the Proposed Action is to: (1) Maintain current levels of military readiness by training in the NWTRC; (2) accommodate future increases in operational training tempo in the NWTRC and support the rapid deployment of naval units or strike groups; (3) achieve and sustain readiness of ships, submarines, and aviation squadrons using the NWTRC so that they can quickly surge significant combat power in the event of a national crisis or contingency operation, consistent with the FRTP; (4) support the acquisition and implementation of advanced military technology into the Fleet; (5) identify shortfalls in range capabilities, particularly training infrastructure and instrumentation, and address through range investments and enhancements; and (6) maintain the long-term viability of the NWTRC while protecting human health and the environment and enhancing the quality and communication capability and safety of the range complex.

The No Action Alternative is the continuation of training and RDT&E.

Alternative 1 consists of an increase in the number of training activities from baseline levels and force structure changes associated with the introduction of new weapon systems, vessels, and aircraft into the Fleet. Alternative 2, the Preferred Alternative, consists of all elements of Alternative 1. In addition, Alternative 2 includes an increase in the number of training activities over Alternative 1 levels and implementation of range enhancements.

The Draft EIS addresses potential environmental impacts on multiple resources, including but not limited to: Air quality; water resources; airborne acoustic environment; biological resources, marine and terrestrial; cultural resources; socioeconomics; and

public health and safety.

No significant impacts are identified for any resource area in any geographic location within the NWTRC Study Area that cannot be mitigated, with the exception of exposure of marine mammals to underwater sound. The Navy has requested from NMFS a Letter of Authorization (LOA) in accordance with the Marine Mammal Protection Act to authorize the incidental take of marine mammals that may result from the implementation of the activities analyzed in the NWTRC Draft EIS/OEIS. In compliance with the Magnuson-Stevens Fisheries Conservation Management Act, the Navy is in consultation with NMFS regarding potential impacts to Essential Fish Habitat. In accordance with section 7 of the Endangered Species Act, the Navy is consulting with NMFS and U.S. Fish and Wildlife Service (USFWS) for potential impacts to federally listed species. The Navy is coordinating with the Washington Department of Ecology, the Oregon Department of Land Conservation and Development, and the California Coastal Commission for a Coastal Consistency Determination under the Coastal Zone Management Act for each respective state. Navv analysis has indicated that under the Clean Air Act requirements, no significant impacts would occur to the regional air quality, and under the Clean Water Act there would be no significant impacts to water quality. National Historic Preservation Act analysis indicated that no significant impacts to cultural resources would occur if the Proposed Action or alternatives were implemented. Implementation of the Proposed Action or alternatives would not disturb, adversely affect, or result in any takes of bald eagles, nor result in a significant adverse effect on the population of a migratory bird species.

The decision to be made by the Navy is to determine which of the alternatives

analyzed in the EIS/OEIS best meet the operational needs of the Navy given that all reasonably foreseeable environmental impacts have been considered.

The Draft EIS/OEIS was distributed to Federal, State, and local agencies, elected officials, and other interested individuals and organizations. The public comment period will end on February 11, 2009. Copies of the Draft EIS/OEIS are available for public review at the following libraries: Humboldt County Library, 1313 Third Street, Eureka, CA; Jefferson County Rural Library, 620 Cedar Avenue, Port Hadlock, WA; Kitsap Regional Library, 1301 Sylvan Way, Bremerton, WA; Lincoln City Public Library, 801 SW Highway 101, Lincoln City, OR; Oak Harbor Public Library, 1000 SE Regatta Drive, Oak Harbor, WA; Port Townsend Public Library, 1220 Lawrence St., Port Townsend, WA; and Timberland Regional Library, 420 Seventh Street, Hoguiam, WA.

The Northwest Training Range Complex Draft EIS/OEIS is also available for electronic public viewing at: http://

www.NWTRangeComplexEIS.com. A paper copy of the Executive Summary or a single CD with the Draft EIS/OEIS will be made available upon written request by contacting Naval Facilities Engineering Command Northwest, Attention: Mrs. Kimberly Kler—NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, WA 98315–1101.

Federal, State, and local agencies, and interested parties are invited to be present or represented at the public hearing. Written comments can also be submitted during the open house sessions preceding the public hearings.

Oral statements will be heard and transcribed by a stenographer; however, to ensure the accuracy of the record, all statements should be submitted in writing. All statements, both oral and written, will become part of the public record on the Draft EIS/OEIS and will be responded to in the Final EIS/OEIS. Equal weight will be given to both oral and written statements. In the interest of available time, and to ensure all who wish to give an oral statement have the opportunity to do so, each speaker's comments will be limited to four (4) minutes. If a long statement is to be presented, it should be summarized at the public hearing with the full text submitted either in writing at the hearing, or mailed to Naval Facilities Engineering Command Northwest, Attention: Mrs. Kimberly Kler—NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, WA 98315-1101. In addition, comments may be submitted

online at http://www.NWTRange ComplexEIS.com during the comment period. All written comments must be postmarked by February 11, 2009, to ensure they become part of the official record. All comments will be addressed in the Final EIS/OEIS.

Dated: December 19, 2008.

#### T.M. Cruz,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E8–30936 Filed 12–29–08; 8:45 am] BILLING CODE 3810-FF-P

#### **DEPARTMENT OF EDUCATION**

#### Submission for OMB Review; Comment Request

AGENCY: Department of Education.

SUMMARY: The Director, Information
Collection Clearance Division,
Regulatory Information Management
Services, Office of Management invites
comments on the submission for OMB
review as required by the Paperwork
Reduction Act of 1995.

**DATES:** Interested persons are invited to submit comments on or before January 29, 2009.

ADDRESSES: Written comments should be addressed to the Office of Information and Regulatory Affairs, Attention: Education Desk Officer, Office of Management and Budget, 725 17th Street, NW., Room 10222, New Executive Office Building, Washington, DC 20503 or faxed to (202) 395–6974.

**SUPPLEMENTARY INFORMATION: Section** 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The IC Clearance Official, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g. new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of

#### **DEPARTMENT OF COMMERCE**

#### National Oceanic and Atmospheric Administration

#### National Estuarine Research Reserve System

**AGENCY:** Estuarine Reserves Division, Office of Ocean and Coastal Resource Management, National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

**ACTION:** Notice of Approval and Availability for the Revised Management Plan for the Chesapeake Bay Virginia National Estuarine Research Reserve.

SUMMARY: The Estuarine Reserves Division, Office of Ocean and Coastal Resource Management, National Ocean Service, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce has approved the Chesapeake Bay Virginia National Estuarine Research Reserve Management Plan Revision. Notice and an opportunity for public comment on the Revised Management Plan was first published in the Federal Register on November 5, 2008 (73 FR 65837).

Four sites along the York River comprise the Chesapeake Bay Virginia National Estuarine Research Reserve; Sweet Hall Marsh, Taskinas Creek, the Catlett Islands, and the Goodwin Islands. The four sites were designated as the Chesapeake Bay Virginia National Estuarine Research Reserve in 1991 pursuant to Section 315 of the Coastal Zone Management Act of 1972, as amended, 16 U.S.C. 1461. The reserve has been operating in partnership with the Virginia Institute of Marine Science under a management plan approved in 1991. Pursuant to 15 CFR Section 92 1.33(c), a state must revise their management plan every five years. The submission of this plan fulfills this requirement and sets a course for successful implementation of the goals and objectives of the reserve. A boundary expansion, a revised geographic vision for the reserve, new facilities, and updated programmatic objectives are notable revisions to the 1991 approved management plan.

The revised management plan outlines the administrative structure; the education, stewardship, and research goals of the reserve; and the plans for future land acquisition and facility development to support reserve operations. This management plan describes how the strengths of the reserve will focus on four areas relevant to the Chesapeake Bay: Functions and

linkages of land-margin ecosystems; ecosystem vulnerability to climate and human-induced stressors; water quality and aquatic stressors; and integrated ocean observing systems.

Since 1991, the reserve has added a coastal training program that delivers science-based information to key decision makers in the Chesapeake Bay; has completed a site profile that characterizes the reserve; and has expanded the monitoring, stewardship and education programs significantly. A new administrative building (2003) and a new science and education lab (2005) have been built to support the growth of reserve programs.

With the approval of this management plan, the Chesapeake Bay Virginia National Estuarine Research Reserve will change their total acreage from 2,849 acres to a new total of 2,705 acres. This change is attributable to boundary modifications at two of the reserve sites. At Sweet Hall Marsh, 189 acres of reserve property are being removed from the reserve boundary due to a change in ownership. At the Taskinas Creek site, 44.5 acres are being added to the reserve boundary to provide a deciduous and hardwood forest buffer to protect the estuarine areas used for research and education.

The 1991 Management Plan proposed a multi-phased expansion of the reserve that started with the four sites on the York River and planned to incorporate over 20 sites throughout Virginia to ensure adequate representation of Virginian estuarine areas important to the Chesapeake Bay. This expansion has not occurred since 1991. Due to the anticipated logistical, economic, and programmatic difficulties of having over 20 sites administered as part of the National Estuarine Research Reserve, the 2008 Management Plan focuses on the York River for the next five years.

#### FOR FURTHER INFORMATION CONTACT:

Michael Miglion at (301) 563–1126 or Laurie McGilvray at (301) 563–1158 of NOAA's National Ocean Service, Estuarine Reserves Division, 1305 East-West Highway, N/ORM5, 10th floor, Silver Spring, MD 20910. For copies of the Chesapeake Bay Virginia Management Plan revision, visit http:// web.vims.edu/cbnerr/index.htm.

Dated: February 4, 2009.

#### David M. Kennedy,

Director, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

[FR Doc. E9–2818 Filed 2–10–09; 8:45 am]

BILLING CODE 3510-22-M

#### **DEPARTMENT OF DEFENSE**

#### **Department of the Navy**

Notice of Extension of Comment Period for the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Northwest Training Range Complex

**AGENCY:** Department of the Navy, DoD. **ACTION:** Notice.

SUMMARY: A notice of availability was published by the U.S. Environmental Protection Agency in the Federal Register (73 FR 79473) on December 29, 2008 for the Northwest Training Range Complex (NWTRC) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). The public review period ends on February 11, 2009. This notice announces a seven-day extension of the public comment period until February 18, 2009.

FOR FURTHER INFORMATION CONTACT: Mrs. Kimberly Kler, Naval Facilities Engineering Command Northwest, Attention: NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, Washington 98315–1101; or http://www.NWTRangeComplexEIS.com.

SUPPLEMENTARY INFORMATION: The public comment period on the NWTRC Draft EIS/OEIS will be extended by seven days until February 18, 2009. Comments may be submitted in writing to Naval Facilities Engineering Command Northwest, Attention: Mrs. Kimberly Kler—NWTRC EIS/OEIS, 1101 Tautog Čircle, Suite 203, Silverdale, WA 98315-1101. In addition, comments may be submitted online at http:// www.NWTRangeComplexEIS.com during the comment period. All written comments must be postmarked by February 18, 2009, to ensure they become part of the official record. All comments will be addressed in the Final EIS/OEIS.

Copies of the Draft EIS/OEIS are available for public review at the following libraries:

- 1. Humboldt County Library, 1313 Third Street, Eureka, CA;
- 2. Jefferson County Rural Library, 620 Cedar Avenue, Port Hadlock, WA;
- 3. Kitsap Regional Library, 1301 Sylvan Way, Bremerton, WA;
- 4. Lincoln City Public Library, 801 SW Highway 101, Lincoln City, OR; 5. Oak Harbor Public Library, 1000 SE
- Regatta Drive, Oak Harbor, WA;
- 6. Port Townsend Public Library, 1220 Lawrence St., Port Townsend, WA;
- 7. Timberland Regional Library, 420 Seventh Street, Hoquiam, WA.

proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to Department of the Army, Military Surface Deployment and Distribution Command, 661 Sheppard Place, Ft. Eustis, VA 23604, ATTN: (Richard Cody), or call Department of the Army Reports clearance officer at (703) 428–6440.

Title, Associated Form, and OMB Number: Department of Defense Standard Tender of Freight Services, SDDC Form 364–R, OMB Control Number 0702–0261.

Needs and Uses: The information derived from the DoD tenders on file with the Military Surface Deployment and Distribution Command (SDDC) is used by SDDC subordinate commands and DoD shippers to select the best value carriers to transport surface freight shipments. Freight carriers furnish information in a uniform format so that the Government can determine the cost of transportation, accessorial, and security services, and select the best value carriers for 1.1 million Bill of Lading shipments annually. The DoD tender is the source document for the General Services Administration postshipment audit of carrier freight bills.

Affected Public: Business or other for-profit.

Annual Burden Hours: 5,391.

Number of Respondents: 434.

Responses per Respondent: 50.

Average Burden per Response: 15 minutes.

Frequency: On occasion.

#### SUPPLEMENTARY INFORMATION:

#### **Summary of Information Collection**

The DoD tender format was developed to take advantage of improved information collection technology and to connect with ongoing initiatives to implement automated systems to file tenders, select carriers, quote rates, and audits. The disciplined data fields of the tenders will facilitate the Electronic Data Interchange of tender data between carriers and SDDC, also between SDDC subordinate commands and DoD shippers. This initiative ultimately will permit electronic filing of the tender and eliminate mailing paper documents, which are manually processed.

Dated: February 19, 2009.

#### Patricia L. Toppings,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. E9-4014 Filed 2-24-09; 8:45 am]

BILLING CODE 5001-06-P

#### **DEPARTMENT OF DEFENSE**

#### **Department of the Army**

[Docket ID: USA-2008-0078]

#### Submission for OMB Review; Comment Request

**ACTION:** Notice.

The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

**DATES:** Consideration will be given to all comments received by March 27, 2009.

Title, Form, and OMB Number: Transportation Discrepancy Report; DD Form 361; OMB Control Number 0702– 0124.

Type of Request: Extension. Number of Respondents: 1,434. Responses per Respondent: 1. Annual Responses: 1,434. Average Burden per Response: 1 hour. Annual Burden Hours: 1,434.

Needs and Uses: DD Form 361 is essential for documenting any loss, damage, or other discrepancy, which may result from the movement of Government freight by commercial transportation companies (carries). The form is ordinarily completed by the Federal agencies for which the transportation service is provided. However, in a small minority of cases (Approximately 9%), contractor personnel acting for the government may be required to complete this form.

Frequency: On occasion.

Respondent's Obligation: Required to obtain or retain benefits.

*OMB Desk Officer:* Ms. Jasmeet Seehra.

Written comments and recommendations on the proposed information collection should be sent to Ms. Seehra at the Office of Management and Budget, Desk Officer for DoD, Room 10236, New Executive Office Building, Washington, DC 20503. You may also submit comments, identified by docket number and title, by the following method:

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal**Register document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> as they are received without change, including any

personal identifiers or contact information.

*DoD Clearance Officer:* Ms. Patricia Toppings.

Written requests for copies of the information collection proposal should be sent to Ms. Toppings at WHS/ESD/Information Management Division, 1777 North Kent Street, RPN, Suite 11000, Arlington, VA 22209–2133.

Dated: February 19, 2009.

#### Patricia L. Toppings,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. E9-4019 Filed 2-24-09; 8:45 am]

BILLING CODE 5001-06-P

#### **DEPARTMENT OF DEFENSE**

#### **Department of the Navy**

Notice of Additional Public Hearing and Extension of Comment Period for the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Northwest Training Range Complex

**AGENCY:** Department of the Navy, DoD.

**ACTION:** Notice.

**SUMMARY:** A notice of availability (NOA) was published by the U.S. Environmental Protection Agency in the Federal Register (73 FR 79473) on December 29, 2008, for the Northwest Training Range Complex (NWTRC) Draft Environmental Impact Statement/ Overseas Environmental Impact Statement (EIS/OEIS). A notice of public hearing dates and locations was published in the Federal Register (73 FR 79856) on December 30, 2008. This notice announces an additional public hearing in Oregon and extension of the public comment period until March 11, 2009. The comment period was previously extended from February 11, 2009 to February 18, 2009 [notice published February 11, 2009 (74 FR 6859); amended NOA published February 13, 2009 (74 FR 7230)].

Dates and Addresses: A public hearing has been scheduled for February 26, 2009, at the Tillamook County Fairgrounds Auditorium, 4603 East 3rd Street, Tillamook, Oregon, to receive oral and written comments on the Draft EIS/OEIS. The meeting will start with an open house session from 5 p.m. to 7 p.m., followed by a presentation and formal public comment period from 7 p.m. to 8:30 p.m. The open house session will allow interested individuals to review information presented in the Draft EIS/OEIS. Navy representatives will be available during the open house

session to clarify information related to the Draft EIS/OEIS.

FOR FURTHER INFORMATION CONTACT: Mrs. Kimberly Kler, Naval Facilities Engineering Command Northwest, Attention: NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, Washington, 98315–1101; or http://www.NWTRangeComplexEIS.com.

SUPPLEMENTARY INFORMATION: Federal, State, and local agencies, and interested parties are invited to be present or represented at the public hearing. Written comments can also be submitted during the open house session preceding the public hearing.

Oral statements will be heard and transcribed by a stenographer; however, to ensure the accuracy of the record, all statements should be submitted in writing. All statements, both oral and written, will become part of the public record on the Draft EIS/OEIS and will be responded to in the Final EIS/OEIS. Equal weight will be given to both oral and written statements. In the interest of available time, and to ensure all who wish to give an oral statement have the opportunity to do so, each speaker's comments will be limited to four (4) minutes. If a long statement is to be presented, it should be summarized at the public hearing with the full text submitted either in writing at the hearing, or mailed to Naval Facilities Engineering Command Northwest, Attention: Mrs. Kimberly Kler—NWTRC EIS/OEIS, 1101 Tautog Čircle, Suite 203, Silverdale, WA, 98315-1101. In addition, comments may be submitted online at http://

www.NWTRangeComplexEIS.com during the comment period. All written comments must be postmarked by March 11, 2009, to ensure they become part of the official record. All comments will be addressed in the Final EIS/OEIS.

Copies of the Draft EIS/OEIS are available for public review at the following libraries:

- 1. Newport Public Library, 35 NW Ney Street, Newport, OR;
- 2. Tillamook County Library, 1716 3rd Street, Tillamook, OR;
- 3. Suislaw Public Library, 1460 9th Street, Florence, OR;
- 4. Driftwood Public Library, 801 SW Highway 101, Lincoln City, OR;
- 5. Humboldt County Library, 1313 Third Street, Eureka, CA;
- 6. Jefferson County Rural Library, 620 Cedar Avenue, Port Hadlock, WA;
- 7. Kitsap Regional Library, 1301 Sylvan Way, Bremerton, WA;
- 8. Oak Harbor Public Library, 1000 SE Regatta Drive, Oak Harbor, WA;
- 9. Port Townsend Public Library, 1220 Lawrence St., Port Townsend, WA;

10. Timberland Regional Library, 420 Seventh Street, Hoquiam, WA.

The NWTRC Draft EIS/OEIS is also available for electronic public viewing at: http://

www.NWTRangeComplexEIS.com.

Dated: February 20, 2009.

#### A. M. Vallandingham,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E9–4042 Filed 2–24–09; 8:45 am]
BILLING CODE 3810–FF–P

#### **DEPARTMENT OF EDUCATION**

### Notice of Proposed Information Collection Requests

AGENCY: Department of Education.
SUMMARY: The Director, Information
Collection Clearance Division,
Regulatory Information Management
Services, Office of Management, invites
comments on the proposed information
collection requests as required by the
Paperwork Reduction Act of 1995.

**DATES:** Interested persons are invited to submit comments on or before April 27, 2009.

**SUPPLEMENTARY INFORMATION: Section** 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The Director, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g. new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. OMB invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper

functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology.

Dated: February 19, 2009.

#### Angela C. Arrington,

Director, Information Collections Clearance Division, Regulatory Information Management Services, Office of Management.

#### Federal Student Aid

Type of Review: Revision.
Title: Federal Family Education Loan
(FFEL) Deferment Request Forms.
Frequency: On occasion.

Affected Public: Individuals or household.

Reporting and Recordkeeping Hour Burden:

Responses: 2,399,196. Burden Hours: 383,871.

Abstract: These forms serve as the means by which borrowers in the FFEL Program may request deferment of repayment on their loans if they meet certain statutory and regulatory eligibility requirements. The holders of a borrower's FFEL Program loans use the information collected on these forms to determine whether a borrower meets the eligibility requirements for the specific deferment type that the borrower has requested.

Requests for copies of the proposed information collection request may be accessed from http://edicsweb.ed.gov, by selecting the "Browse Pending Collections" link and by clicking on link number 3916. When you access the information collection, click on "Download Attachments" to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW., LBJ, Washington, DC 20202-4537. Requests may also be electronically mailed to ICDocketMgr@ed.gov or faxed to 202-401-0920. Please specify the complete title of the information collection when making your request.

Comments regarding burden and/or the collection activity requirements should be electronically mailed to *ICDocketMgr@ed.gov*. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

[FR Doc. E9–3986 Filed 2–24–09; 8:45 am] BILLING CODE 4000–01–P

**ACTION:** Notice.

**SUMMARY:** The Corporation for National and Community Service (hereinafter the "Corporation"), as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the general public and federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) (44 U.S.C. Sec. 3506(c)(2)(A)). This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. Individuals who use a telecommunications device for the deaf (TTY-TDD) may call (202) 565-2799 between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday.

Currently, the Corporation is soliciting comments concerning its proposed renewal of its Disaster Response Database (DRD). The DRD is a data collection tool that allows the Corporation to collect information from its programs and grantees on disaster response activities across the country. This tool serves as a central repository of information on Corporation disaster response activities for reporting to the public.

Copies of the information collection request can be obtained by contacting the office listed in the **ADDRESSES** section of this notice.

**DATES:** Written comments must be submitted to the individual and office listed in the **ADDRESSES** section by May 18, 2009.

**ADDRESSES:** You may submit comments, identified by the title of the information collection activity, by any of the following methods:

- (1) By mail sent to: Corporation for National and Community Service; Attention Phil Shaw, Emergency Management Coordinator, 9th Floor; 1201 New York Avenue, NW., Washington, DC 20525.
- (2) By hand delivery or by courier to the Corporation's mailroom at Room 8100 at the mail address given in paragraph (1) above, between 9 a.m. and 4 p.m. Monday through Friday, except Federal holidays.
- (3) By fax to: (202) 606–3477, Attention Phil Shaw, Emergency Management Coordinator.
- (4) Electronically through the Corporation's e-mail address system: pshaw@cns.gov.

**FOR FURTHER INFORMATION CONTACT:** Phil Shaw, (202) 606–6697, or by e-mail at *pshaw@cns.gov*.

**SUPPLEMENTARY INFORMATION:** The Corporation is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Corporation, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are expected to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology (e.g., permitting electronic submissions of responses).

#### **Background**

The Corporation for National and Community Service regularly engages its national service programs and grantees to respond to disasters as a part of its mandate to promote community service and meet community needs. The great number of national service participants and variety of support offered necessitate a centralized reporting tool to track and measure resources dedicated to supporting communities recovering from disaster.

Current Action: The Corporation seeks to renew the data collection: CNCS Disaster Response Database (OMB control number 3015–0114) scheduled to expire on June 30th, 2009. The database is a Web-based system that permits programs and grantees to report contributions to disaster responses. The system will be updated to include a previously approved quantifiable accomplishment reporting module.

The current data collection can be found at http://
www.nationalservice.gov/relief/
tbl\_response/
AddTbl\_responsePage.aspx.

Type of Review: Renewal. Agency: Corporation for National and Community Service.

*Title:* Disaster Relief Information Collection.

Agency Number: None.
Affected Public: Corporation for
National and Community Service

OMB Number: 3045-0114.

programs/grantees involved in disaster activities.

Total Respondents: 100. Frequency: Every two weeks. Average Time per Response: Averages 30 minutes.

Estimated Total Burden Hours: 50 Hours.

Total Burden Cost (capital/startup): None.

Total Burden Cost (operating/maintenance): None.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Dated: March 12, 2009.

#### Kristin McSwain.

Chief of Program Operations.
[FR Doc. E9–5884 Filed 3–17–09; 8:45 am]

#### **DEPARTMENT OF DEFENSE**

#### **Department of the Navy**

Notice of Extension of Comment Period for the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Northwest Training Range Complex

**AGENCY:** Department of the Navy, DoD. **ACTION:** Notice.

SUMMARY: An amended notice of availability was published by the U.S. Environmental Protection Agency in the Federal Register (74 FR 8940) on February 27, 2009 for the Northwest Training Range Complex (NWTRC) Draft Environmental Impact Statement/ Overseas Environmental Impact Statement (EIS/OEIS) extending the public comment period to March 11, 2009. This notice announces a further extension of the public comment period until April 13, 2009.

FOR FURTHER INFORMATION CONTACT: Mrs. Kimberly Kler, Naval Facilities Engineering Command Northwest, Attention: NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, Washington, 98315–1101; or http://www.NWTRangeComplexEIS.com.

SUPPLEMENTARY INFORMATION: The public comment period on the NWTRC Draft EIS/OEIS will be extended until April 13, 2009. Comments may be submitted in writing to Naval Facilities Engineering Command Northwest, Attention: Mrs. Kimberly Kler—NWTRC EIS/OEIS, 1101 Tautog Circle, Suite 203, Silverdale, WA 98315—1101. In

addition, comments may be submitted online at <a href="http://">http://</a>

www.NWTRangeComplexEIS.com during the comment period. All written comments must be postmarked by April 13, 2009, to ensure they become part of the official record. All comments will be addressed in the Final EIS/OEIS.

Copies of the Draft EIS/OEIS are available for public review at the following libraries:

- 1. Humboldt County Library, 1313 Third Street, Eureka, CA;
- 2. Jefferson County Rural Library, 620 Cedar Avenue, Port Hadlock, WA;
- 3. Kitsap Regional Library, 1301 Sylvan Way, Bremerton, WA;
- 4. Driftwood Public Library, 801 SW. Highway 101, Lincoln City, OR;
- 5. Newport Public Library, 35 NW. Ney Street, Newport, OR;
- 6. Tillamook County Library, 1716 3rd Street, Tillamook, OR;
- 7. Suislaw Public Library, 1460 9th Street, Florence, OR;
- 8. Oak Harbor Public Library, 1000 SE. Regatta Drive, Oak Harbor, WA;
- 9. Port Townsend Public Library, 1220 Lawrence St., Port Townsend, WA;

10. Timberland Regional Library, 420 Seventh Street, Hoquiam, WA.

The NWTRC Draft EIS/OEIS is also available for electronic public viewing at: http://

www.NWTRangeComplexEIS.com.

Dated: March 13, 2009.

#### A.M. Vallandingham,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E9–5895 Filed 3–17–09; 8:45 am]

#### **DEPARTMENT OF EDUCATION**

### Notice of Proposed Information Collection Requests

**AGENCY:** Department of Education. **ACTION:** Notice of Proposed Information Collection Requests.

**SUMMARY:** The IC Clearance Official, Regulatory Information Management Services, Office of Management, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

**DATES:** An emergency review has been requested in accordance with the Act (44 U.S.C. Chapter 3507(j)), since public harm is reasonably likely to result if normal clearance procedures are followed. Approval by the Office of Management and Budget (OMB) has been requested by March 23, 2009.

**ADDRESSES:** Written comments regarding the emergency review should

be addressed to the Office of Information and Regulatory Affairs, Attention: Bridget Dooling, Desk Officer, Department of Education, Office of Management and Budget; 725 17th Street, NW., Room 10222, New Executive Office Building, Washington, DC 20503 or faxed to (202) 395-6974. **SUPPLEMENTARY INFORMATION: Section** 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Director of OMB provide interested Federal agencies and the public an early opportunity to comment on information collection requests. The Office of Management and Budget (OMB) may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The IC Clearance Official, Regulatory Information Management Services, Office of Management, publishes this notice containing proposed information collection requests at the beginning of the Departmental review of the information collection. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g., new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. ED invites

public comment. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner, (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected, and (5) how might the Department minimize the burden of this collection on respondents, including through the use of information technology.

Dated: March 10, 2009.

#### Angela C. Arrington,

IC Clearance Official, Regulatory Information Management Services, Office of Management.

## Office of Elementary and Secondary Education

Type of Review: New. Title: State Fiscal Stabilization Fund Grant Application.

Abstract: On February 17, 2009, the American Recovery and Reinvestment Act of 2009 (ARRA) became law. A major part of ARRA is the new State Fiscal Stabilization Fund (Stabilization) program. The program provides \$53,600,000,000 to States to keep teachers in the classroom, prevent the cutting of valuable education programs, and help mitigate college tuition increases. Additionally, the Stabilization program will provide resources that States and districts may use to implement important education reforms, such as launching strategies that address inequities in the distribution of highly qualified teachers, building robust data systems that allow districts to better track student achievement, raising standards and strengthening student assessments, and turning around failing schools. We are requesting approval of the Stabilization program grant application so that State governors may apply for the first portion of these funds.

Additional Information: In order to provide immediate assistance to help alleviate the substantial budget shortfalls that States are facing, the Department is committed to providing 67 percent of each State's Stabilization allocation within a very short timeframe, necessitating emergency clearance of the Stabilization program application. The requested approval date for OMB approval is March 23. This formula grant program has two distinct portions—the Education Fund and the Government Services Fund. Specifically, the Department intends to award each State with 67 percent of the total amount that it is to receive under both the Education Fund and the Government Services Fund within two weeks of our receipt of a complete application.

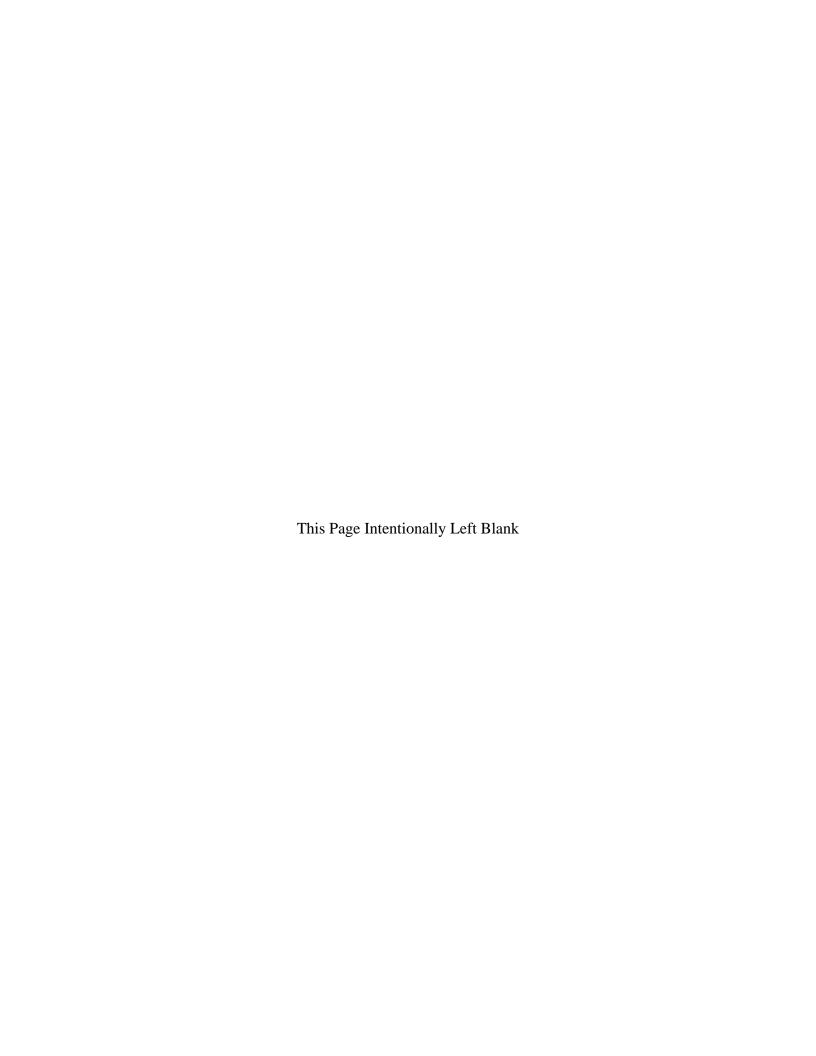
*Frequency:* One time.

Affected Public: Business or other forprofit; State, Local or Tribal Gov't.

Reporting and Recordkeeping Hour Burden:

Responses: 52. Burden Hours: 894.

Requests for copies of the proposed information collection request may be accessed from http://edicsweb.ed.gov, by selecting the "Browse Pending Collections" link and by clicking on link number 3976. When you access the information collection, click on "Download Attachments" to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW., LBJ, Washington, DC 20202–4537. Requests may also be electronically mailed to the Internet address



## Appendix B

Cooperating Agency Correspondence



# DEPARTMENT OF THE NAVY OFFICE OF THE CHIEF OF NAVAL OPERATIONS 2000 NAVY PENTAGON WASHINGTON, DC 20350-2000

IN REPLY REFER TO

5090 Ser N456E/7U158218 2 Aug 2007

Dr. William T. Hogarth
Assistant Administrator
National Oceanic and Atmospheric
Administration (NOAA) Fisheries
1315 East West Highway
Silver Spring, MD 20910

Dear Dr. Hogarth:

In accordance with the National Environmental Policy Act (NEPA) and Executive Order 12114, the Department of the Navy (Navy) is initiating the preparation of an Environmental Impact Statement/ Overseas Environmental Impact Statement (EIS/OEIS) to evaluate potential environmental effects of using the Northwest Training Range Complex (NWTRC) to achieve and maintain Fleet readiness and to support and conduct current, emerging, and future training activities and research, development, test, and evaluation (RDT&E) events.

In order to adequately evaluate the potential environmental effects of the Proposed Action, Navy and the National Marine Fisheries Service would need to work together on acoustic effects to marine species protected under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act. To assist in this effort and in accordance with 40 CFR Part 1501 and the Council on Environmental Quality Cooperating Agency guidance issued on January 30, 2002, Navy requests NMFS serve as a cooperating agency for the development of the NWTRC EIS/OEIS.

The Proposed Action for the Navy NWTRC EIS/OEIS is to:

- Maintain baseline operations at current levels;
- Increase training operations from current levels as necessary to support the Fleet Readiness Training Plan;
- Accommodate mission requirements associated with force structure change;
- Implement enhanced range complex capabilities;

• Increase and accommodate planned RDT&E events (primarily Unmanned Aerial Vehicles).

The Proposed Action will further our statutory obligations under Title 10 of the United States Code governing the roles and responsibilities of the Navy.

The No Action Alternative is the continuation of training activities and major range events in the NWTRC at the current level. Two action alternatives are proposed to accomplish the Proposed Action. Alternative 1 consists of an increase in the number of training activities, from levels described in the No Action Alternative, along with force structure changes associated with the introduction of new weapon systems, vessels, and aircraft into the Fleet. Alternative 2 consists of all elements of Alternative 1 with an increase in the number of training activities and implementation of range enhancements.

The EIS/OEIS will address measurably foreseeable activities in the particular geographical areas affected by the No-Action Alternative and action alternatives. This EIS/OEIS will analyze the effects of sound in the water on marine mammals in the areas where NWTRC activities occur. In addition, other environmental resource areas that will be addressed applicable in the EIS/OEIS include: air quality; airspace; biological resources, including threatened and endangered species; cultural resources; geology and soils; hazardous materials and waste; health and safety; land use; noise; socioeconomics; transportation; and water resources.

As the lead agency, the Navy will be responsible for overseeing preparation of the EIS/OEIS that includes but is not limited to the following:

- Gathering all necessary background information and preparing the EIS/OEIS and all necessary permit application associated with acoustic issues on the underwater ranges.
- Working with NMFS personnel to determine the method of estimating potential effects to protected marine species, including threatened and endangered species.
- Determining the scope of the IES/OEIS, including the alternatives evaluated.

- Circulating the appropriate NEPA documentation to the general public and any other interested parties.
- Scheduling and supervising meetings held in support of the NEPA process, and compiling any comments received.
- Maintaining an administrative record and responding to any Freedom of Information Act requests relating to the EIS/OEIS.

As a cooperating agency, the Navy requests NMFS support the Navy in the following manner:

- Provide timely comments after the Agency Information Meeting (which will be held at the onset of the EIS/OEIS process) and on working drafts of the EIS/OEIS documents. The Navy requests that comments on draft EIS/OEIS documents be provided within 21 calendar days.
- Respond to Navy requests for information. Timely NMFS input will be critical to ensure a successful NEPA process.
- Coordinate, to the maximum extent practicable, any public comment periods that is necessary in the MMPA permitting process with the Navy's NEPA public comment periods.
- Participate, as necessary, in meetings hosted by the Navy for discussion of EIS/OEIS related issues.
- Adhere to the overall project schedule as agreed upon by the Navy and NMFS.
- Provide a formal, written response to this request.

The Navy views this agreement as important to the successful completion of the NEPA process for the Northwest Training Range Complex EIS/OEIS. It is Navy's goal to complete the analysis as expeditiously as possible, while using the best scientific information available. NMFS assistance will be invaluable in this endeavor.

My point of contact for this action is Ms. Karen M. Foskey, (703) 602-2859, email: Karen. Foskey@navy.mil.

Sincerely,

WILLIAM G. MATTHEIS

Acting Director, Environmental Readiness Division (OPNAV N45)

#### Copy to:

Deputy Assistant Secretary of the Navy (Environment)
Office of Assistant General Counsel (Installation & Environment)
Commander, U.S. Fleet Forces Command (N73, N77)
Commander, U.S. Pacific Fleet (N01CE, N7)
Commander, Naval Installations Command (N45)
Commander, Navy Region Northwest (N40)

Commander, Navy Region Southwest (N40)



#### **DEPARTMENT OF THE NAVY**

COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO: 5090 NO1CEB/0692 9 Aug 07

Ren Lohoefener Regional Director U.S. Fish & Wildlife Service - Pacific Region 911 NE 11<sup>th</sup> Ave Portland, OR 97232

Dear Mr. Lohoefener:

In accordance with the National Environmental Policy Act (NEPA), the Department of the Navy (Navy) is initiating the preparation of an Environmental Impact Statement (EIS)/Overseas EIS (OEIS) to support decisions by the Navy concerning the Proposed Action to increase usage and to enhance capability of the Northwest Training Range Complex (NWTRC). In order to adequately evaluate the potential environmental effects of the Proposed Action on threatened and endangered species, the Navy is requesting, in accordance with 40 CFR Part 1501 and the Council on Environmental Quality Cooperating Agency guidance issued on January 30, 2002, that U.S. Fish & Wildlife Service serve as a cooperating agency for the development of the EIS/OEIS.

The No Action Alternative is the continuation of training activities and major range events in the NWTRC. Two action alternatives are proposed to accomplish the Proposed Action. Alternative 1 consists of an increase in the number of training activities from levels described in the No Action Alternative, along with force structure changes associated with the introduction of new weapon systems, vessels, and aircraft into the Fleet. Alternative 2 consists of all elements of Alternative 1 with an increase in the number of training activities and implementation of range enhancements.

The purpose of the proposed action is to:

• Achieve and maintain Fleet readiness using the NWTRC to support and conduct current, emerging, and future training activities and research, development, test, and evaluation (RDT&E) events (primarily Unmanned Aerial Vehicles);

• Expand Warfare Missions supported by the NWTRC, consistent with the requirements of the Fleet Readiness Training Plan (FRTP) and other transformation initiatives; and

Upgrade/modernize existing range capabilities to enhance and sustain Navy training and RDT&E events.

The EIS/OEIS will address measurably foreseeable activities in the particular geographical areas affected by the No-Action Alternative and action alternatives. The EIS/OEIS will also analyze the potential impacts of additional training missions. This EIS/OEIS will analyze the effects of sound in the water on marine mammals in the areas where NWTRC activities occur. In addition, other environmental resource areas that will be addressed as applicable in the EIS/OEIS include but not limited to: air quality; airspace; biological resources, including threatened and endangered species; cultural resources; geology and soils; hazardous materials and waste; health and safety; land use; noise; socioeconomics; transportation; and water resources.

As the lead agency, the Navy will be responsible for overseeing preparation of the EIS/OEIS that includes but is not limited to the following:

- Gathering all necessary background information and preparing the EIS/OEIS.
- Working with U.S. Fish & Wildlife Service personnel to evaluate potential impacts of changes and enhancements on wildlife refuges, critical habitat, and wildlife resources including threatened and endangered species.

Determining the scope of the EIS/OEIS, including the alternatives evaluated.

• Circulating the appropriate NEPA documentation to the general public and any other interested parties.

Scheduling and supervising meetings held in support of the NEPA process, and compiling any comments received. • Maintaining an administrative record and responding to any Freedom of Information Act requests relating to the EIS/OEIS.

As a cooperating agency, the Navy requests the U.S. Fish & Wildlife Service support the Navy in the following manner:

- Providing timely comments throughout the EIS process, to include, on working drafts of the EIS/OEIS documents. The Navy requests that comments on draft EIS/OEIS documents be provided within 30 calendar days.
- Responding to Navy requests for information. Timely U.S. Fish & Wildlife Service input will be critical to ensure a successful NEPA process.
- Participating, as necessary, in meetings hosted by the Navy for discussion of EIS/OEIS related issues.
- Adhering to the overall schedule as set forth by the Navy.
- Providing a formal, written response to this request.

My point of contact for this is Carolyn L. Winters, (360) 315-5092 or at Email: carolyn.winters@navy.mil.

Sincerely,

RIOS

captain, U.S. Navy

Deputy Fleet Civil Engineer

By direction

Copy to:

Chief of Naval Operations (N45)

Commander, U.S. Fleet Forces Command (N73, N77)

Commander, U.S. Pacific Fleet (N7)

Commander, Naval Installations Command (N45)

Commander, Navy Region Northwest (N40)

Commander, Navy Region Southwest (N40)

Commander, Naval Facilities Engineering Command, Northwest (N45)

Commander, Naval Facilities Engineering Command, Southwest (N45)



## UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE 1315 East-West Highway Silver Spring, Maryland 20910

THE DIRECTOR

SEP : 7 2007

William G. Mattheis
Acting Director, Environmental Readiness Division
Department of the Navy
2000 Navy Pentagon
Washington, DC 20350-2000

Dear Mr. Mattheis:

Thank you for your letter requesting that NOAA's National Marine Fisheries Service (NMFS) be a cooperating agency in the preparation of an Environmental Impact Statement (EIS) to evaluate potential environmental effects of using the Department of the Navy's Northwest Training Range Complex to achieve and maintain military readiness and to support and conduct training activities and research, development, test, and evaluation events.

We support the Navy's decision to prepare an EIS on these activities and agree to be a cooperating agency, due, in part, to our responsibilities under section 101(a)(5)(A) of the Marine Mammal Protection Act and section 7 of the Endangered Species Act. As agreed upon with Navy staff, NMFS staff will provide comments on draft EISs to the Navy within 28 days of receipt of the document. Otherwise, NMFS will make every effort to support the Navy in the specific ways described in your letter.

If you need any additional information, please contact Ms. Jolie Harrison at (301) 713-2289, ext. 166.

Sincerely,

William T. Hogarth, Ph.D.





## Appendix C

Air Emissions Calculations

Table C-1. Surface Ship Air Emissions—No Action Alternative

ė	raining	r of Events m Totals	clature		Mode	ime on (hrs)	nt at Each r Level Time on	nge (hrs)	from shore centage 3-12		Time 0-1	Total Total Time 3- Time 12 nm >12 ni												Em	issions	<b>3</b>								Greenh	ouse Gas Emissio	ons	
cenai	/ре Т	umbe	ошеи	Objects Trees	esse	hip Ti ange	ower ower	ange	n fro		from	from from	"	F	<b>F</b>	- (11- /1)							F	0.40	011-1		(11)	Ftt	40 01			(11 )		(	tons per year)		
<u> </u>	<u> </u>	ŽΔ	ž	Ship/Boat Type	_ j š	ਲ ਲੋ Hours	<u>й й г</u> %   Но	ours	Perce	<u>ē čē</u> ent		shore shore Hours	СО	NOx	ions Factor	SOx	PM10		Emissions Nox	HC	Shore (lbs)	PM	CO	ons 3-12 nm Nox	HC	Sox	ry (lbs) PM	Emissions	Nox	HC	Sox	PM	CO	CO2	N2O	CH4	CO2e
Training Exerc	cises Air Combat Maneuvers	0																																			
2	A-A Missiles	0																																			
_																																					
3	S-A Gunnery Exercise	17 51 4	FFG	Guided Missile Destroyer Guided Missile Frigate Logistics/Support		3.0		53.0	0%	6 100%	0.0	0.0 51.0 0.0 153.0 0.0 12.0	66.82	48.9 67.7 22.0	8.0 7.8 2.8	17.9 11.6 66.1	2.5 3.3 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	5303.5 10223.5 44.8	2493.9 10361.2 263.9	409.5 1194.9 33.5	914.9 1770.2 793.7	125.5 497.3 159.4	2.6517 5.1117 0.0224	2.8661 5.5250 0.0242	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.8905 5.5719 0.0244						
4	S-A Missiles	0	CVN	Nuclear Carrier (No emissions)		4.0		C	0% 0%	6 100%	0.0	0.0 0.0																									
5	S-S GUNEX	4 21 63 2	DDG FFG	Nuclear Carrier (No emissions) Guided Missile Destroyer Guided Missile Frigate Logistics/Support	DDG-1 FFG-1 AOE-1	2.0 2.0	100% 4 100% 4 100% 12 100% 4	26.0 C	0% 0% 0% 0%	6 100% 6 100%		0.0 42.0	65.75	47.3 66.4 22.0	8.1 7.9 2.8	17.0 10.9 66.1	2.4 3.1 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	4325.2 8284.5 14.9	1988.3 8360.1 88.0	340.2 994.1 11.2	715.7 1372.1 264.6	98.7 395.6 53.1	2.1626 4.1423 0.0075	2.3374 4.4771 0.0081	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.3573 4.5152 0.0081						
6	A-S BOMBEX	0																																			
7	SINKEX	2 4 2 1	DDG FFG	Cruiser Guided Missile Destroyer Guided Missile Frigate Submarines (No emissions)	CG-2 DDG-2 FFG-2	8.0 8.0	100% 1 100% 3 100% 1 100% 8	6.0 C	0% 0% 0% 0%	6 100% 6 100%	0.0		107.78 103.99 66.82	47.1 48.9 67.7	8.8 8.0 7.8	21.0 17.9 11.6	2.6 2.5 3.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	1724.5 3327.7 1069.1	753.9 1564.8 1083.5	141.1 257.0 125.0	336.3 574.1 185.1	42.1 78.7 52.0	0.8622 1.6638 0.5346	0.9320 1.7984 0.5778	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.9399 1.8136 0.5827						
8	MPA ASW TRACKEX	32	SSN	Submarines (No emissions)		8.0	100% 25	56.0	0% 0%	6 100%	0.0	0.0 256.0																									
9	EER/IEER ASW																																				
10 Su	rface Ship ASW TRACKEX	24 36		Guided Missile Destroyer Guided Missile Frigate								17.3 838.1 25.9 1257.			7.8 11.6	21.2 16.1	2.8 4.3	921.6 1555.7	465.2 1012.3	67.7 150.9	183.3 208.4	24.2 55.7	1843.3 3111.4	930.4 2024.6	135.5 301.7		48.4 111.5				17784.1 20214.5		46.0814 77.7859	49.8071 84.0748	0.0013 0.0022	0.0013 0.0022	50.2299 84.7885
11	Sub ASW Trackex	64 32		Submarines (No emissions) Submarines (No emissions)																																	
12 Elec	Combat	0 0 0 0 0	DDG FFG AOE SSBN	Nuclear Carrier (No emissions) Guided Missile Destroyer Guided Missile Frigate Logistics/Support Submarines (No emissions) Submarines (No emissions)	FFG-2	2.0 2.0 2.0 2.0	100% (	0.0 0 0.0 0 0.0 0	0% 50% 0% 50% 0% 50%	% 50% % 50% % 50% % 50%	0.0 0.0 0.0			48.9 67.7 22.0	8.0 7.8 2.8	17.9 11.6 66.1	2.5 3.3 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000						
13 Mine	e Countermeasures	60	RHIB	Rigid Hull Inflatable Boat	RIB-4	5.0	100% 30	00.0	00% 0%	6 0%	300.0	0.0 0.0	0.34	9.1	0.1	1.4	0.2	102.0	2742.0	18.0	432.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0510	0.0551	0.0000	0.0000	0.0556
14 Land	d Demolition Training					l																															
15 Inser	rtion/Extraction	0				ĺ																															
16 NSW	V Training	35 70		Rigid Hull Inflatable Boat Seal Delivery Vehicle	RIB-4	6.0	100% 2	10.0	00% 0%	6 0%	210.0	0.0 0.0	0.34	9.1	0.1	1.4	0.2	71.4	1919.4	12.6	302.4	31.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0357	0.0386	0.0000	0.0000	0.0389
17 HAR	RMEX	0									l																										
18 ISR		0																										l									
19 UAV	,	0									I																	ļ									
	Total	I 419									<u> </u>		Total Emi	ssions tor	ns			1.33	3.07	0.12	0.56	0.08	2.48	1.48	0.22	0.39	0.08	137.31	85.14	12.35	22.46	4.63	141.11	152.52	0.0039	0.0039	153.82

Total Emissions within US Territory 3.80 4.55 0.34 0.95 0.16

Notes: 1 - Ship nomenclature highlighted in yellow signifies no specific AQ Emissions data for that vessel.

Table C-2. Surface Ship Air Emissions—Alternative 1

ario	Training	oer of Events	am rotals		el Mode	Time on je (hrs)	ent at Each er Level I Time on	ige (hrs) centage 0-3 from shore	entage 3-12 om Shore	om Shore	otal Total To ne 0-Time 3- Tii nm 12 nm >12 om from fro	al ne nm					-							Er	nission	s								Greenh	nouse Gas Emissi	ons	
cens	уре	di p	lo me	Ship/Boat Type	,esse	hip a	owe	kange Perce	e E		om from fro		Em	issions F	Factors (lb	/hr)			Fmissions	0-3 nm Off	shore (lbs	3	Emiss	sions 3-12 n	m Offshore	- US Territo	orv (lbs)	Emission	s >12 nm Of	ffshore - Ou	tside US Te	rritory (lbs)		(	(tons per year)		
<u> </u>	F			omp/Deat Type	>	Hours	% Hou	irs	ш с	ш с	Hours	CC			HC S		PM10		Nox	HC	Sox	PM		Nox	HC	Sox	PM					PM	СО	CO2	N2O	CH4	CO2e
Training I	Exercises Air Combat Maneuvers							1																													
1		U																																			
2	A-A Missiles	0																																			
3	S-A Gunnery Exercise	19 57 4	FFG	Guided Missile Destroyer Guided Missile Frigate Logistics/Support	FFG-2	3.0	100% 171	.0 0%	0%	100%	0.0 0.0 57 0.0 0.0 17 0.0 0.0 12	.0 66.8	2 67.	7 7	7.8	11.6	2.5 3.3 13.3	0.0 0.0 0.0	5927.4 11426.2 44.8	2787.3 11580.1 263.9	457.7 1335.5 33.5	1022.6 1978.5 793.7	140.2 555.8 159.4	2.6517 5.1117 0.0224	2.8661 5.5250 0.0242	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.8905 5.5719 0.0244									
4	S-A Missiles	0	CVN	Nuclear Carrier (No emissions)		4.0		0%	0%	100%	0.0 0.0 0	0																									
5	S-S GUNEX	4 23 70 2			DDG-1 FFG-1 AOE-1	2.0 2.0	100% 140	.0 0% 0.0 0%	0%	100% ( 100% (	0.0 0.0 8 0.0 0.0 46 0.0 0.0 14 0.0 0.0 4	.0 102. 0.0 65.7		4 7	7.9 1	10.9	2.4 3.1 13.3	0.0 0.0 0.0	4737.1 9205.0 14.9	2177.6 9289.0 88.0	372.6 1104.6 11.2	783.8 1524.6 264.6	108.1 439.6 53.1	2.3685 4.6025 0.0075	2.5600 4.9746 0.0081	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.5818 5.0168 0.0081									
6	A-S BOMBEX	0																																			
7	SINKEX	4 8 4 2	DDG FFG	Cruiser Guided Missile Destroyer Guided Missile Frigate Submarines (No emissions)	CG-2 DDG-2 FFG-2	8.0 8.0	100% 64 100% 32	.0 0% .0 0%	0%	100% 100%	0.0 0.0 32 0.0 0.0 64 0.0 0.0 32 0.0 0.0 16	.0 103. .0 66.8	99 48.9	9 8	8.0 1	17.9	2.6 2.5 3.3	0.0 0.0 0.0	3449.0 6655.4 2138.2	1507.8 3129.6 2167.0	282.2 513.9 249.9	672.6 1148.2 370.2	84.2 157.4 104.0	0.8622 1.6638 0.5346	0.9320 1.7984 0.5778	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.9399 1.8136 0.5827									
8	MPA ASW TRACKEX	33	SSN	Submarines (No emissions)		8.0	100% 264	1.0 0%	0%	100%	0.0 0.0 26	1.0																									
9	EER/IEER ASW																																				
10	Surface Ship ASW TRACKEX	C 26 39	DDG FFG	Guided Missile Destroyer Guided Missile Frigate							9.4 18.7 90 4.0 28.1 136				7.8 2 1.6 1		2.8 4.3	998.4 1685.4	503.9 1096.7	73.4 163.4	198.6 225.8		1996.9 3370.7		146.8 326.9				48882.4 106376.4				46.0814 77.7859	49.8071 84.0748	0.0013 0.0022	0.0013 0.0022	50.2299 84.7885
11	Sub ASW Trackex	67 33		Submarines (No emissions) Submarines (No emissions)																																	
12	Elec Combat	0 0 0 0 0	DDG FFG AOE SSBN	Guided Missile Frigate Logistics/Support	FFG-2	2.0 2.0 2.0 2.0	100% 0.	0 0% 0 0% 0 0% 0 0%	50% 50% 50% 50%	50% 0 50% 0 50% 0	0.0 0.0 0 0.0 0.0 0 0.0 0.0 0	0 66.8	2 67.	7 7	7.8 1	11.6	2.5 3.3 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000										
13	Mine Countermeasures	4	RHIB	Rigid Hull Inflatable Boat	RIB-4	5.0	100% 20	.0 1009	% 0%	0% 2	0.0 0.0 0	0.3	4 9.1	C	0.1	1.4	0.2	6.8	182.8	1.2	28.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0493	0.0533	0.0000	0.0000	0.0537
14	Land Demolition Training					l																															
15	Insertion/Extraction	0				1																															
16	NSW Training	35 70	RHIB SDB	Rigid Hull Inflatable Boat Seal Delivery Vehicle	RIB-4	6.0	100% 210	0.0 100%	% 0%	0% 21	10.0 0.0 0	0.3	4 9.1	C	0.1	1.4	0.2	71.4	1919.4	12.6	302.4	31.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0357	0.0386	0.0000	0.0000	0.0389
17	HARMEX	0								ı																											
18	ISR	0								ı																		1									
19	UAV	0								ĺ																		I									
	Tot	tal 399										Total	Emissions	tons				1.38	1.85	0.13	0.38	0.06	2 68	1.60	0.24	0.42	0.09	151 96	94 12	13 67	24.86	5.10	141.78	153 24	0.0039	0.0039	154.54
	100	000										i Otal I	13310113	.0110			t	1.00	1.00	0.10	0.00	0.00	2.00	1.00	0.24	0.72	0.03	101.00	V-7.12	10.07	24.00	0.10	141.70	.00.27	3.0003	0.0000	107.07

Total Emissions within US Territory 4.06 3.45 0.36 0.80 0.15

Notes: 1 - Ship nomenclature highlighted in yellow signifies no specific AQ Emissions data for that vessel.

Table C-3. Surface Ship Air Emissions—Alternative 2

io	r of Events m Totals	clature	Mode	me on (hrs)	nt at Each r Level Time on	nge (hrs) centage 0-3	n snore tage 3-12 n Shore	ဆီတ် Time	al Total Tota e 0- Time 3- Tim m 12 nm >12 r	е											Em	issions	3								Greenh	ouse Gas Emissi	ions	
enar pe T	ımbe	u u u	- See	ip Ti	ercen ower l	ange ercen	n from n from		m from fror	n																					(	tons per year)		
<u>й</u>	žā	ž Ship/B	oat Type 5	් Hours	s % Ho	ours C	Percent		re shore shore	CO		ions Factors	, ,	PM10		Emissions Nox	0-3 nm Offs	shore (lbs) Sox	PM	CO	Nox		US Territor Sox	ry (lbs) PM	Emissions	Nox	fshore - Out	side US Ter	ritory (lbs) PM	со	CO2	N2O	CH4	CO2e
aining Exercises  1 Air Combat Maneuvers																																		
2 A-A Missiles	0																																	
		DDQ Outstand Misselfus Dece	DD0		1000/ 11	4.0		4000/		0 103.99	10.0		47.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110510	5574.0	045.4	0045.0	280.4	0.0547	0.0004	0.0004	0.0004	0.0005
3 S-A Gunnery Exercise	38 113 9	DDG Guided Missile Des FFG Guided Missile Frig AOE Logistics/Support		2 3.0	100% 33	9.0 0%	6 0%	100% 0.0	0 0.0 114 0 0.0 339 0 0.0 27.0	0 66.82	48.9 67.7 22.0	8.0 7.8 2.8	17.9 11.6 66.1	2.5 3.3 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	11854.9 22652.0 100.7	5574.6 22957.1 593.7	915.4 2647.6 75.3	2045.2 3922.2 1785.8	1101.8 358.6	2.6517 5.1117 0.0224	2.8661 5.5250 0.0242	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.8905 5.5719 0.0244
4 S-A Missiles	0	CVN Nuclear Carrier (No	emissions)	4.0		0%	6 0%	100% 0.0	0.0 0.0																									
5 S-S GUNEX	8 42 126 4	CVN Nuclear Carrier (No DDG Guided Missile Des FFG Guided Missile Frig AOE Logistics/Support	stroyer DDG-	-1 2.0 1 2.0		4.0 0% 52.0 0%		100% 0.0 100% 0.0		102.98 0 65.75	47.3 66.4 22.0	8.1 7.9 2.8	17.0 10.9 66.1	2.4 3.1 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	8650.3 16569.0 29.8	3976.6 16720.2 175.9	680.4 1988.3 22.3	1431.4 2744.3 529.1	197.4 791.3 106.2	2.3685 4.6025 0.0075	2.5600 4.9746 0.0081	0.0001 0.0001 0.0000	0.0001 0.0001 0.0000	2.5818 5.0168 0.0081
6 A-S BOMBEX	0																																	
7 SINKEX	4 8 4 2	CG Cruiser DDG Guided Missile Des FFG Guided Missile Frig SSN Submarines (No en	ate FFG-2	-2 8.0 2 8.0	100% 33 100% 64 100% 33 100% 16	4.0 0% 2.0 0%	6 0% 6 6 0%	100% 0.0 100% 0.0	0.0 32.0	103.99 66.82	47.1 48.9 67.7	8.8 8.0 7.8	21.0 17.9 11.6	2.6 2.5 3.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	3449.0 6655.4 2138.2	1507.8 3129.6 2167.0	282.2 513.9 249.9	672.6 1148.2 370.2	84.2 157.4 104.0	0.8622 1.6638 0.5346	0.9320 1.7984 0.5778	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.9399 1.8136 0.5827
8 MPA ASW TRACKEX	34	SSN Submarines (No en	nissions)	8.0	100% 27	2.0 0%	6 0%	100% 0.0	0.0 272	0																								
9 EER/IEER ASW																																		
10 Surface Ship ASW TRACK	XEX 26 39	DDG Guided Missile Des FFG Guided Missile Frig							1 18.7 907 0 28.1 1361			7.8 11.6	21.2 16.1	2.8 4.3		503.9 1096.7					1007.9 2193.3	146.8 326.9		52.4 120.7			7118.1 15852.3	19266.1 21899.0	2542.2 5856.1	46.0814 77.7859	49.8071 84.0748	0.0013 0.0022	0.0013 0.0022	50.2299 84.7885
11 Sub ASW Trackex	67 33	SSBN Submarines (No en SSGN Submarines (No en																																
12 Elec Combat	50 50 100 25 25 25	CVN Nuclear Carrier (No DDG Guided Missile Des FFG Guided Missile Frig AOE Logistics/Support SSBN Submarines (No en SSGN Submarines (No en	stroyer DDG- late FFG-2 AOE- nissions)	-2 2.0 2 2.0 -1 2.0 2.0	100% 20	00.0 0% 00.0 0% 0.0 0% 0.0 0%	50% 50% 50% 50%	50% 0.0 50% 0.0 50% 0.0 50%	0 50.0 50.0 0 100.0 100.0 0 25.0 25.0	0 66.82	48.9 67.7 22.0	8.0 7.8 2.8	17.9 11.6 66.1	2.5 3.3 13.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	5199.5 6682.0 93.3	2445.0 6772.0 549.8	401.5 781.0 69.8	897.0 1157.0 1653.5	123.0 325.0 332.0	5199.5 6682.0 93.3	2445.0 6772.0 549.8	401.5 781.0 69.8	897.0 1157.0 1653.5	123.0 325.0 332.0	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000
13 Mine Countermeasures	4	RHIB Rigid Hull Inflatable	Boat RIB-4	5.0	100% 20	0.0 1009	% 0%	0% 20.	0.0 0.0	0.34	9.1	0.1	1.4	0.2	6.8	182.8	1.2	28.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0493	0.0533	0.0000	0.0000	0.0537
14 Land Demolition Training				I																					1									
15 Insertion/Extraction	0			1																														
16 NSW Training	35 70	RHIB Rigid Hull Inflatable SDB Seal Delivery Vehic							.0 0.0 0.0		9.1	0.1	1.4	0.2	71.4	1919.4	12.6	302.4	31.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0357	0.0386	0.0000	0.0000	0.0389
17 HARMEX	0							1																	I									
18 ISR	0																								l									
19 UAV	0							I																	I									
	Total 836									Total Fmi	ssions ton	ie.			1 20	1.85	0.13	0.29	0.06	9.67	C 40	0.00	2.20	0.40	172 20	110.01	1 15 90	20.76	6.18	141.78	153.24	0.0030	0.0039	154 54

Total Emissions within US Territory 10.05 8.34 0.99 2.66 0.54

Notes: 1 - Ship nomenclature highlighted in yellow signifies no specific AQ Emissions data for that vessel.

NWTRC EIS/DEIS Ari Emissions Analysis FINAL

Table C-4. Aircraft Air Emissions—No Action Alternative

_	les	ature	Time on irs)	ırs) 3.000 ft	ow 3,000	ge 0-3 shore	ge 3-12 Shore			Total al Time e 3- >12																									Em	ission	s								Gree	nhouse Gas Emiss	sions	
O Type Training	/C Sorti	omenck	ve. A/C ange (h	ange (h Below	ime Bel	ercenta m from	ercenta m from	E Si	nm 12 r om fro	ım nm	cenario	Aircraft		Engine		Fuel Fl			<b>-</b>	Indices. Ibs	4 000 H - 4				Fusication	ns Factors	(IL (L.)		_		-3 nm Offs			Farinaia	ns 3-12 nm	Offeb	IIC Taarita	(!!- +)	Emission	ns >12 nm (	Offshore—	Outside US	Territory		0.00	(tons per year)		
o Type Training	No.	Z	Hours H	urs %	Hour	s Lc	Percent	L c 311	Hou		No.		Eng	ine Mode				СО	NOx	HC			110	СО			SOx	PM10	СО	NOx		SOx	PM		NOx	HC	SOx	PM	СО	NOx	HC	SOx	PM	СО	CO2	N2O	CH4	CO2e
raining Operations																																																
Air Combat Maneuvers	2021	FA-18E/F EA-6B F-16	1.5 30	31.5 09	6.0	100%	0%	0% 0.	0.0	0.00		EA-6B	J52-P-40	8A (assur	umea 2 neap 2 umea 1	4049 4227 3859	7	0.89 5.19 1.35	11.58 6.77 8.44	0.12 0.84 0.76	0.40 0.40 0.40	10.	.48 4	43.88		0.97 7.10 2.93	3.24 3.38 1.54	51.10 88.60 23.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02 66.51 0.07	989.6 3,043,925.1 3,219.0		0.0280 86.0235 0.0910	
2 A-A MISSILEX	0	EA16G	2.0	.0 09	6.0	0%	0% 1	00% 0.	0.0	0.00		EA16G	J52-P-40	8A (assur	ne ap 2	4227	7	5.19	6.77	0.84	0.40	10.	.48 4	43.88	57.23	7.10	3.38	88.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00 0.00	0.0 0.0 0.0	0.0000	0.0000 0.0000 0.0000	
3 S-A GUNEX	18	Learjet	3.0 5	1.0 50	% 27.0	1%	2% 5	97% 0.	27 0.5	4 26.19		Learjet	TFE 731	-2-2B	2	531.7	6	22.38	5.90	4.28	0.54	4.1	20 2	23.80	6.27	4.55	0.57	4.47	6.43	1.69	1.23	0.16	1.21	12.85	3.39	2.46	0.31	2.41	623.36	164.34	119.21	15.04	116.99	0.64 0.00	29,413.5 0.0	0.9542	0.8312 0.0000	
4 S-A MISSILEX	0 0 0	P-3 Learjet C-130	3.0	.0 67	% 0.0	1%	2% 9 2% 9	97% 0.	0.0	0.00		Learjet	TFE 731	-2-2B	ASU\ 4 2 e appı 4	531.7	6	1.82 22.38 4.03	8.43 5.90 6.71	0.41 4.28 0.97	0.40 0.54 0.40	4.1	20 2	23.80		1.97 4.55 3.30	1.92 0.57 1.36	19.06 4.47 13.50	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.0 0.0 0.0	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0 0.0 0.0										
5 S-S GUNEX	0																																											0.00 0.00 0.00	0.0 0.0 0.0	0.0000	0.0000 0.0000 0.0000	0.0
6 A-S BOMBEX	24	P-3	1.0 2	1.0 90	% 21.6	1%	2% 5	97% 0.	22 0.4	3 20.95		P-3	T56-A-1	(assume	ASU\ 4	1200	)	1.82	8.43	0.41	0.40	3.9	97	8.74	40.46	1.97	1.92	19.06	1.89	8.74	0.43	0.41	4.12	3.77	17.48	0.85	0.83	8.23	183.04	847.80	41.23	40.23	399.26	0.10 0.10 0.00	4,798.1 0.0	0.1557	0.1356 0.0000	
7 SINKEX	1	E-2 FA-18E/F P-3 SH-60B	16.0 1	8.0 10	% 12.8 % 1.6	0% 0%	0% 1	00% 0. 00% 0.	0.0	0 12.80 0 1.60		FA-18E/F P-3	F414-GE	-400 (ass (assume	e 30% 2 ume a 2 ASU\ 4	1100 4049 1200 600	9	2.16 0.89 1.82 6.25	8.06 11.58 8.43 6.40	0.49 0.12 0.41 0.55	0.40 0.40 0.40 0.40	6.3	31 97	8.74		1.08 0.97 1.97 0.66	0.88 3.24 1.92 0.48	8.73 51.10 19.06 5.04	0.00 0.00 0.00 0.00	15.21 92.25 13.98 24.00	56.74 1200.32 64.74 24.58	3.45 12.44 3.15 2.11	2.82 41.46 3.07 1.54	27.95 654.06 30.49 16.13	0.08 0.46 0.07 0.12	3,480.0 21,111.8 3,198.7 5,492.3	0.1129 0.6849 0.1038 0.1782	0.0983 0.5966 0.0904 0.1552	3,517.0 21,336.0 3,232.0 5,550.0									
8 MPA ASW TRACKEX	200	P-3	6.0 12	00.0 75	% 900.	5%	10%	85% 45	.00 90.0	00 765.00	0	P-3	T56-A-1	(assume	ASU\ 4	1200	)	1.82	8.43	0.41	0.40	3.9	97	8.74	40.46	1.97	1.92	19.06	393.12	1820.88	88.56	86.40	857.52	786.24	3641.76	177.12	172.80	1715.04	6683.04	30954.96	1505.52	1468.80	14577.84	0.00 5.24 0.00	0.0 239,905.8 0.0	7.7826	0.0000 6.7799 0.0000	0.0 242,460.7 0.0
9 EER/IEER ASW	10	P-3	6.0	0.0 50	% 30.0	17%	17%	5.	10 5.1	0 19.80		P-3	T56-A-1	(assume	ASU\ 4	1200	)	1.82	8.43	0.41	0.40	3.9	97	8.74	40.46	1.97	1.92	19.06	44.55	206.37	10.04	9.79	97.19	44.55	206.37	10.04	9.79	97.19	172.97	801.19	38.97	38.02	377.31	0.00 0.26 0.00	11,995.3 0.0	0.3891	0.3390	12,123.0
10 Surface Ship ASW TRACKEX																																												0.00	0.0	0.0000	0.0000	0.0
11 Submarine ASW TORPEX	0																																											0.00	0.0	0.0000	0.0000	0.0
12 Electronic Combat Exercise	13 182 2135	P-3 EP-3 EA-6B	1.5 2	3.0 09	6.0	0%	3% 9 3% 9	97% 0.	0.0	0.00		EP-3	T56-A-1	(assume	ASU\ 4 ASU\ 4 ne ap 2	1200 1200 4227	)	1.82 1.82 5.19	8.43 8.43 6.77	0.41 0.41 0.84	0.40 0.40 0.40	3.9	97	8.74	40.46 40.46 57.23	1.97 1.97 7.10	1.92 1.92 3.38	19.06 19.06 88.60	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.09 1.19 70.26 0.00	3,898.5 54,578.6 3,215,626.0 0.0		0.1102 1.5424 90.8758 0.0000	55,159.										
13 Mine Countermeasures	10	SH-60B	2.0 2	0.0 100	% 20.0	100%	0%	0% 20	.00 0.0	0.00		SH-60B	T700-GE	-401C	2	600		6.25	6.40	0.55	0.40	4.2	20	7.50	7.68	0.66	0.48	5.04	150.00	153.60	13.20	9.60	100.80	0.00	0.00	0.00	0.00	0.00						0.08	3,432.7 0.0	0.1114	0.0970 0.0000	3,469.3
14 Land Demolition Training																																												0.00 0.00	0.0		0.0000	0.0
15 Insertion/Extraction		C-130 SH-60B											T56-A-4: T700-GE		e appı 4 2	850 600		4.03 6.25	6.71 6.40	0.97 0.55	0.40 0.40					3.30 0.66	1.36 0.48	13.50 5.04	0.00 1260.00	0.00 1290.24	0.00 110.88	0.00 80.64	0.00 846.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16 0.63 0.00	7,525.6 28,834.8 0.0	0.9354	0.2127 0.8149 0.0000	7,605.8 29,141.9 0.0
16 NSW Training	0																																											0.00	0.0	0.0000	0.0000	
17 HARMEX		EA-6B					3%								ne ap 2	4227		5.19	6.77	0.84	0.40			43.88	57.23	7.10	3.38	88.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.64 0.00	4,102,747.2 0.0	133.0945 0.0000	115.9465 0.0000	4,146,441.
18 ISR	94	P-3	6.0 5	4.0 40	% 225.	6 0%	0% 1	00% 0.	0.0	0 225.60	0	P-3	T56-A-1	(assume	ASU\ 4	1200 hp		1.82 s/hp-hr	8.43	0.41	0.40	3.9	97	8.74	40.46	1.97	1.92	19.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1970.84	9128.68	443.98	433.15	4299.03	2.46 0.00	112,755.7 0.0	3.6578	3.1866 0.0000	113,956.
19 UAV	12	Scan Eagle	6.0 7	2.0 100	% 72.0		0%	0% 72	.00 0.0	0.00		Scan Eagl	e 2.5 hp e	ngine	1	2.5	6.	.68E-03	3.10E-02	2.51E-03	3 2.05E-	03 2.20	E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00 0.00 0.00	0.0	0.0000	0.0000	0.4
Totals	7586			-	1						•						-						Tot	tal Emissi	ons tons				0.93	1.74	0.11	0.09	0.95	0.42	1.93	0.10	0.09	0.91	4.89	21.62	1.09	1.02	10.25	238.08	10,896,928.2	353.50	307.95	11,012,980.3

 Total Emissions within US Territory
 1.35
 3.68
 0.21
 0.19
 1.87

 0.00
 0.00
 0.00
 0.00
 0.00

#### Table C-5. Aircraft Air Emissions—Alternative 1

	s	ıture	(hrs)	uo a	3,000 ft	Je 0-3	je 3-12 Shore	ot por	tal Total ie 0-Time 3	Total Time																							Em	issions	5								0-	b C F		
ပုံ မေ B Type Training	VC Sortie	Vomencla	Ave. A/C	ange (hr	% Below ?	t Percentag Im from s	Percentag	g g g g g	nm 12 nm om from ore shore	nm from	Scenario Aire	craft	Engi	nes	Fuel Flo	w	Fmi	ission Indi	ices lhs/1 (	000 lbs fuel			Emiss	sions Facto	ors (lb/hr)			Emissions	0-3 nm Off	shore (lhs)		Emissio	ns 3-12 nm	Offshore—	US Territo	ry (lbs)	Emission	ns >12 nm (	Offshore—	Outside US	Territory		Gr	eenhouse Gas E (tons per ye		
3,7 7 3	No.		Hours H	lours	% Hou	rs	Percent		Hours		No. Ty			del No.				NOx	HC	SOx	PM10	СО			SOx	PM10	СО	NOx			PM			НС		PM	СО	NOx	нс	SOx	PM	СО	CO2	N2O	CH4	CO
aining Operations																																														
1 Air Combat Maneuvers	2987	EA-6B	F 1.5 1.5 4 1.5	480.5		1009 1009 1009	6				EA	-6B J52-	P-408A (ass	ssume a 2 ume ap 2 ssume a 1	4049 4227 3859		9 6	11.58 6.77 8.44	0.12 0.84 0.76	0.40 0.40 0.40	6.31 10.48 5.98	7.21 43.88 5.21	93.77 57.23 32.57	0.97 7.10 2.93		51.10 88.60 23.08																0.02 66.51 0.07	989.6 3,043,925.1 3,219.0	98.745	9 86.02	35 3,076,
2 A-A MISSILEX	48	EA16G	2.0	96.0			1	00%			EA	16G J52-	P-408A (ass	ume ap 2	4227	5.1	9 6	6.77	0.84	0.40	10.48	43.88	57.23	7.10	3.38	88.60																				
3 S-A GUNEX	20	Learje	3.0	60.0	50% 30.	0 1%	2% 9	97% 0.3	30 0.60	29.10	Lea	arjet TFE	731-2-2B	2	531.76	22.	38 5	5.90	4.28	0.54	4.20	23.80	6.27	4.55	0.57	4.47	7.14	1.88	1.37	0.17	1.34	14.28	3.76	2.73	0.34	2.68	692.63	182.60	132.46	16.71	129.98	0.64	29,413.5	0.954	2 0.83	12 29,
4 S-A MISSILEX		P-3 Learjei C-130			67% 67% 67%	1%	2% 9 2% 9 2% 9	97%			Le	arjet TFE	731-2-2B	ne ASU\ 4 2 me appi 4	531.76	1.8 22.3 4.0	38 5	8.43 5.90 6.71	0.41 4.28 0.97	0.40 0.54 0.40	3.97 4.20 3.97	8.74 23.80 13.70	6.27	1.97 4.55 3.30	1.92 0.57 1.36	19.06 4.47 13.50																				
5 S-S GUNEX																																														
6 A-S BOMBEX	30	P-3	1.0	30.0	90% 27.	0 1%	2% 9	97% 0.2	27 0.54	26.19	F	-3 T56-	A-14 (assun	ne ASU\ 4	1200	1.8	2 8	8.43	0.41	0.40	3.97	8.74	40.46	1.97	1.92	19.06	2.36	10.93	0.53	0.52	5.15	4.72	21.85	1.06	1.04	10.29	228.80	1059.75	51.54	50.28	499.08	0.10	4,798.1	0.155	7 0.13	56 4,
7 SINKEX	2	FA-18E/ P-3	F 16.0 2	256.0 32.0	10% 25. 10% 3.2	6	1	00% 00% 00% 00%		6.40 25.60 3.20 6.40	FA-1	8E/F F414	-GE-400 (a	me 30% 2 ssume a 2 ne ASU\ 4 2	4049	2.1 0.8 1.8 6.2	9 1		0.49 0.12 0.41 0.55	0.40 0.40 0.40 0.40	3.97 6.31 3.97 4.20	4.75 7.21 8.74 7.50	93.77 40.46	1.08 0.97 1.97 0.66	0.88 3.24 1.92 0.48	8.73 51.10 19.06 5.04											30.41 184.50 27.96 48.00	113.48 2400.64 129.48 49.15	6.90 24.88 6.30 4.22	5.63 82.92 6.14 3.07	55.90 1308.12 60.98 32.26	0.08 0.46 0.07 0.12	3,480.0 21,111.8 3,198.7 5,492.3	3 0.684 7 0.103	9 0.59 8 0.09	66 21, 04 3,
8 MPA ASW TRACKEX	205	P-3	6.0 1	230.0	75% 922	.5 5%	10% 8	35% 46.	.13 92.25	784.13	F	-3 T56-	A-14 (assun	ne ASU\ 4	1200	1.8	2 8	8.43	0.41	0.40	3.97	8.74	40.46	1.97	1.92	19.06	402.95	1866.40	90.77	88.56	878.96	805.90	3732.80	181.55	177.12	1757.92	6850.12	31728.83	1543.16	1505.52	14942.29	5.24	239,905.8	3 7.782	6 6.77	99 242,
9 EER/IEER ASW	11	P-3	6.0	66.0	50% 33.	0 17%	17%	5.6	61 5.61	21.78	F	-3 T56-	A-14 (assun	ne ASU\ 4	1200	1.8	2 8	8.43	0.41	0.40	3.97	8.74	40.46	1.97	1.92	19.06	49.01	227.00	11.04	10.77	106.90	49.01	227.00	11.04	10.77	106.90	190.27	881.31	42.86	41.82	415.04	0.26	11,995.3	0.389	1 0.33	90 12,
10 Surface Ship ASW TRACKEX																																														
11 Submarine ASW TORPEX																																														
12 Electronic Combat Exercise	195			92.5			3% 9 3% 9 3% 9	97%			E	P-3 T56-	A-14 (assun	ne ASU\ 4 ne ASU\ 4 ume ap 2		1.8 1.8 5.1	2 8	8.43 8.43 6.77	0.41 0.41 0.84	0.40 0.40 0.40	3.97 3.97 10.48	8.74 8.74 43.88	40.46		1.92 1.92 3.38	19.06 19.06 88.60																0.09 1.19 70.26	3,898.5 54,578.6 3,215,626.0	1.770	5 1.54	24 55,
13 Mine Countermeasures	12	SH-60E	3 2.0	24.0	00% 24.	0 1009	6	24.	.00		SH	-60B T700	-GE-401C	2	600	6.2	5 6	6.40	0.55	0.40	4.20	7.50	7.68	0.66	0.48	5.04	180.00	184.32	15.84	11.52	120.96											0.08	3,432.7	7 0.111	4 0.09	70 3,
14 Land Demolition Training																																														
15 Insertion/Extraction			1.0 2		00% 186	.0 1009		186	5.00				A-425 (assu I-GE-401C	me appi 4		4.0 6.2		6.71 6.40	0.97 0.55	0.40 0.40	3.97 4.20	13.70 7.50		3.30 0.66		13.50 5.04	1395.00	1428.48	122.76	89.28	937.44											0.16 0.63	7,525.6 28,834.8			
16 NSW Training																																														
17 HARMEX	3000	EA-6B	1.5 4	500.0			3% 9	97%			EA	-6B J52-	P-408A (ass	ume ap 2	4227	5.1	9 6	6.77	0.84	0.40	10.48	43.88	57.23	7.10	3.38	88.60																89.64	4,102,747.2	2 133.094	5 115.94	65 4,146,
18 ISR	100	P-3	6.0 6	0.00	40% 240	.0	1	00%		240.00	F	-3 T56-	A-14 (assun	ne ASU\ 4	1200 hp	1.8	2 8	8.43	0.41	0.40	3.97	8.74	40.46	1.97	1.92	19.06											2096.64	9711.36	472.32	460.80	4573.44	2.46	112,755.7	7 3.657	8 3.18	66 113,
19 UAV		Scan Eag Global Hawk			10% 7.2 10% 60.			7.2 60.				Eagle 2.5 l		1	2.5 2.5						2.20E-03 2.20E-03		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											0.00	0.0	0.000	0.00	00
	100	ilawk	0.0	,00.0	1070 00.	1007	U	00.	.00		Globa	111aw 12.01	p origine		2.5	0.000	-00 3.1	102-02	2.512-03	2.00E*03	2.20E*03	3.00	3.00	3.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00															
Totals	9204	•																				Total Em	issions ton	s			1.02	1.86	0.12	0.10	1.03	0.44	1.99	0.10	0.09	0.94	5.17	23.13	1.14	1.09	11.01	238.08	10,896,928.2	353.5	0 307.	95 11,012,

Total Emissions within US Territory 1.46 3.85 0.22 0.20 1.96

NWTRC EIS/OEIS

Air Emissions Analysis

#### Table C-6. Aircraft Air Emissions—Alternative 2

•	ties	clature	C Time or (hrs)	hrs) v 3,000 ft	low 3,000	age 0-3 n shore	n Shore age >12	Time 0	Total T - Time 3-	>12	<b>.</b>																									Emiss	sions										Gre	enhouse Gas	Emissions		
enari	Sor	men	re. A/ inge (	inge (	a B	n fror	rc en	from	12 nm r from fr	rom 8	5																													Emissi	ons >12 nr	n Offshore		US Territ	ory			(tons per y	/ear)		
ර් Type Training	No.	ž	€ ½° ⊢ Hours Ho	<u>ı∝" %</u> urs %	⊢≓⊭ Hours	Per Per	cent	shore	shore sh Hours		o. Typ		Eng ingine Me			uel Flow lbs/hr	СО		ssion Ind IOx		1,000 lbs f		110	co		ns Factors HC		PM10	CO	Emission					issions 3-1					CO	NOx	(lbs) HC		x P	м	СО	CO2	N2O		CH4	CO2e
raining Operations					1						71																																							****	
1 Air Combat Maneuvers	2987	EA-6B	1.5 9 1.5 44 1.5 4	30.5		100% 100% 100%					EA-6	E/F F414 B J52-F 6 F110	-408A (as	sume ap	2	4049 4227 3859	0.89 5.19 1.35	6	1.58 i.77 i.44	0.12 0.84 0.76	0.40 0.40 0.40	10	.48	3.88		0.97 7.10 2.93	3.24 3.38 1.54	51.10 88.60 23.08																		0.02 66.51 0.07	989.6 3,043,925.1 3,219.0	98.7	459	0.0280 86.0235 0.0910	1,000.2 3,076,342.8 3,253.3
2 A-A MISSILEX	96	EA16G	2.0 19	2.0			1009	6			EA16	G J52-F	-408A (as	sume ap	2	4227	5.19	6	i.77	0.84	0.40	10	.48	3.88	57.23	7.10	3.38	88.60																							
3 S-A GUNEX	40	Learjet	3.0 12	0.0 50%	60.0	1%	2% 97%	0.60	1.20 58	8.20	Lear	et TFE	31-2-2B		2	531.76	22.38	5	i.90	4.28	0.54	4.	20 2	3.80	6.27	4.55	0.57	4.47	14.28	3.76	2.73	0.34	2.68	28.5	6 7.5	3 5.	.46 (	0.69	5.36	1385.25	365.19	264.92	2 33.4	2 259	9.97	0.64	29,413.5	0.9	542	0.8312	29,726.7
4 S-A MISSILEX	4	Learjet	3.0 1 3.0 1 3.0	2.0 67%	8.0	1%		0.08	0.16 7 0.16 7		Lear	T56-A et TFE 7 0 T56-A	31-2-2B		2	1200 531.76 850	1.82 22.38 4.03	5	i.43 i.90 i.71	0.41 4.28 0.97	0.40 0.54 0.40	4.	20 2	3.80	40.46 6.27 22.81	1.97 4.55 3.30	1.92 0.57 1.36	19.06 4.47 13.50	0.70 1.91		0.16 0.36								3.05 0.72			15.28 35.34									
5 S-S GUNEX																																																			
6 A-S BOMBEX	30	P-3	1.0 3	0.0 90%	27.0	1%	2% 97%	0.27	0.54 26	6.19	P-3	T56-A	-14 (assu	ne ASUV	4	1200	1.82	8	1.43	0.41	0.40	3.	97	8.74	40.46	1.97	1.92	19.06	2.36	10.93	0.53	0.52	5.15	4.72	2 21.	85 1.	.06 1	1.04	10.29	228.80	1059.7	5 51.54	50.2	8 499	9.08	0.10	4,798.1	0.1	557	0.1356	4,849.2
7 SINKEX	2	FA-18E/F P-3	16.0 6 16.0 25 16.0 3 16.0 6	6.0 10% 2.0 10%	25.6 3.2		1009 1009 1009 1009	6	25	5.40 5.60 3.20 5.40	FA-18 P-3	T56-A E/F F414 T56-A OB T700-	GE-400 ( -14 (assu	ssume a ne ASUV	2	1100 4049 1200 600	2.16 0.89 1.82 6.25	1 · 8	i.06 1.58 i.43 i.40	0.49 0.12 0.41 0.55	0.40 0.40 0.40 0.40	6. 3.	31 97	7.21 8.74	17.73 93.77 40.46 7.68	1.08 0.97 1.97 0.66	0.88 3.24 1.92 0.48	8.73 51.10 19.06 5.04												184.50 27.96	113.48 2400.6 129.48 49.15	4 24.88	82.9 6.1	2 130 4 60	8.12 .98	0.08 0.46 0.07 0.12	3,480.0 21,111.8 3,198.7 5,492.3	0.6 0.1	849 038	0.0983 0.5966 0.0904 0.1552	3,517.0 21,336.6 3,232.8 5,550.8
8 MPA ASW TRACKEX	210	P-3	6.0 12	60.0 75%	945.0	5% 1	0% 85%	47.25	94.50 80	3.25	P-3	T56-A	-14 (assu	ne ASUV	4	1200	1.82	8	.43	0.41	0.40	3.	97	8.74	40.46	1.97	1.92	19.06	412.78	1911.92	92.99	90.72	900.4	0 825.5	55 3823	.85 18	5.98 18	31.44 1	1800.79	7017.19	32502.7	1 1580.8	1542	24 1530	06.73	5.24	239,905.8	7.7	826	6.7799	242,460.7
9 EER/IEER ASW	12	P-3	6.0 7	2.0 50%	36.0	17%	7% 66%	6.12	6.12 23	3.76	P-3	T56-A	-14 (assu	ne ASUV	4	1200	1.82	8	.43	0.41	0.40	3.	97	8.74	40.46	1.97	1.92	19.06	53.46	247.64	12.04	11.75	116.6	2 53.4	6 247	.64 12	.04 1	1.75	116.62	207.57	961.42	46.76	45.6	2 452	2.77	0.26	11,995.3	0.3	891	0.3390	12,123.0
10 Surface Ship ASW TRACKEX																																																			
11 Submarine ASW TORPEX																																																			
12 Electronic Combat Exercise	391	EP-3	1.5 4 1.5 58 1.5 68	6.5			3% 97% 3% 97% 3% 97%	5			EP-	T56-A T56-A B J52-F	-14 (assu	ne ASUV	4	1200 1200 4227	1.82 1.82 5.19	8	i.43 i.43 i.77	0.41 0.41 0.84	0.40 0.40 0.40	3.	97	8.74		1.97 1.97 7.10	1.92 1.92 3.38	19.06 19.06 88.60																		0.09 1.19 70.26	3,898.5 54,578.6 3,215,626.0	1.7	705	0.1102 1.5424 90.8758	3,940.0 55,159.8 3,249,872.3
13 Mine Countermeasures	12	SH-60B	2.0 2	1.0 100%	24.0	100%		24.00			SH-6	0B T700-	GE-401C		2	600	6.25	6	i.40	0.55	0.40	4.	20	7.50	7.68	0.66	0.48	5.04	180.00	184.32	15.84	11.52	120.9	6												0.08	3,432.7	0.1	114	0.0970	3,469.3
14 Land Demolition Training																																																			
15 Insertion/Extraction			1.0 2 2.0 18			100% 100%		186.00				00 T56-A 0B T700-			4 2	850 600	4.03 6.25		i.71 i.40	0.97 0.55	0.40 0.40				22.81 7.68	3.30 0.66	1.36 0.48	13.50 5.04	1395.00	1428.48	122.76	89.28	937.4	4												0.16 0.63	7,525.6 28,834.8			0.2127 0.8149	7,605.8 29,141.9
16 NSW Training																																																			
17 HARMEX	3000	EA-6B	1.5 45	0.00			3% 97%	5			EA-6	B J52-F	-408A (as	sume ap	2	4227	5.19	6	i.77	0.84	0.40	10	.48	13.88	57.23	7.10	3.38	88.60																		89.64	4,102,747.2	133.0	945 1	115.9465	4,146,441.3
18 ISR	100	P-3	6.0 60	0.0 40%	240.0		1009	6	24	10.00	P-3	T56-A	-14 (assu	ne ASUV	4	1200 hp	1.82	8	1.43	0.41	0.40	3.	97	8.74	40.46	1.97	1.92	19.06												2096.64	9711.3	6 472.3	2 460.	30 457	3.44	2.46	112,755.7	3.6	578	3.1866	113,956.5
19 UAV		Global	6.0 7					7.20 60.00				agle 2.5 hp	•			2.5					2.05E-0				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00														0.00	0.0	0.0	000	0.0000	0.0
	100	намк	6.0 60	0.0 10%	60.0	100%		60.00			Giodal I	Hawk 2.5 hp	engine		1	2.5	6.68E-C	ა პ.10	UE-U2	∠.51E-03	2.05E-0	ıs 2.20	E-U3	J.UU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00																		
Totals	11787			'				•		_							•						To	al Emission	ons tons				1.03	1.90	0.12	0.10	1.04	0.46	6 2.0	5 0.	.10 (	0.10	0.97	5.74	23.83	1.25	1.1	2 11	.37	238.08	10,896,928.2	353	3.50	307.95	11,012,980.2

Total Emissions within US Territory 1.49 3.95 0.23 0.20 2.01

Table C-7. Ordnance Expenditures—Baseline

March   Marc			et Explosive V		rounds are 1 each (ea.) and for	or Demolitions	and Other	Ordnance a	are in pounds		Fmissi	ion Facto	r (lb ner ll	or Ih ner	item)				Fmiss	sions ton	s/vear		
Second	Ordnance (				Fate			NEW ea.								Lead	CO2	со				SO2	Lead
March   Marc	ВОМВ		No Data			1 11 0 0	tou noo.		ea.														
Teal				LGTR				0															
March   Marc			No Dete					_															
March   Marc			No Data			12					0.3184						0	0.366797	C	0	0	(	)
March   Marc				GBU12 500 lb				192	ea.														
March   Marc						88	-																
Mary						4	Į.		ea.		0.1482						0	0.131898	C	0	0	(	)
Martin   M				MK83 INERT																			
Part	OTHER ORD	)	No AQ data					NEW															
Column		CNAF					1			1.2 0.	.0044	0.011				0.00004	0.31248	0.001146	0.0028644	0	0	(	1.04
March   Marc				Fuse		17,340	)																
March   Marc			No Data			510	)			6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	C	0	0	(	)
TRILOG				Grenades		170		0.0813	13.8	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0.004354	0.000145	4.35362E-05	0.000145	0.000104	8.2926E-07	9.67
TRILOG								40.00															
March   Marc			No Data	M1A2 BANGALORE TORP				10.00	U								0	0	·	0	0	(	ĺ
Marches   1.00								8.16	0	C	0.15108						0	0	C	0	0	(	)
No.				M112 DEMO CHARGE		1,060	)			7.90E-01 2.	.60E-02	7.90E-03	2.60E-02	1.90E-02		1.70E-04	0.50244	0.016536	0.0050244	0.016536	0.012084	(	0.00
WELLOW   STATE   STA																							
WELLOW   STATE   STA																							
No.			No Data	-																			
MATERIAL PROPERTY   1			No Data	MK36 M0 DEMO CHARGE				4.10	0								0	0	C	0	0	(	D
No.   Size   S			No Data	MK75 CHARGE				50.00	0								0	0	C	0	0	(	D
MATERIAL STATE OF THE PROPERTY			No Data			4		0.08	0.32								0	0	C	0	0	(	)
March   Marc			No Data					0.00001	0.0000				_	_		_							
March   Marc			No Data	MK123 NONELEC DET (ft)				0.00001	0.0000														
Column   C			No Data					20.00	0	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	c	0	0	C	O
March   Marc			No Data	MK140 FLEXIBLE				0.04	0														
March   Marc				MK174		901																	F
Part				SIGNAL MK 18(G950)																			
Part			No Data	C4 0.5 LB		3	3	0.50	1.5														
March   Marc			No Data	C4 5 LB		511		5.00	2555	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0.804825	0.026828	0.00804825	0.026828	0.019163	0.0001533	0.00
March   Marc			No Data No Data	C4 300 LB C4 500 LB		03		1.00	0	6.30E-01	0.021 0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	0.504096	0 0	0	3.300076	)
March   Marc			No Data	DEMO SHEET				6.00	6630		0.398		_	_		_		0				_	
Martin			No Data	DEMO CHARGE		34,000		5.00	0	6.005.5	0.0-	6.00=	0.405	4.505	4.00=	4 ***							
Martin		=	AP-42			- <u>58,</u> 831		0.1375		6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0		0	0		,
1.0	GUNFIRE (L	.arge)	AP-42	155MM HE					ea.	6.51 2.3	35E+01	1.43E+00	0.496	0.2418		2.26E-03	0	0	C	0	0	(	)
## 1965   1965   1965   1966		5"/54	AP-42	5"/54 BLP		1,216	i		ea.	1.60E-02 2.	.00E-02	9.40E-02	1.20E-03	9.30E-04		6.00E-06	0.009728	0.01216		V	0.000565	(	3.65
FRE CHAPT   1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				5"/54 HECVT					ea.	1.60E-02 2.	.00E-02		1.20E-03	9.30E-04		6.00E-06	0	0	,		0	(	0
Part				5"/54 HEVT 5"/54 ILL					ea. ea.	1.60E-02 2. 1.50E-02 1.	.00E-02 .40E-02	3.60E-04	1.20E-03 9.20E-04	9.30E-04 7.60E-04		6.00E-06 1.30E-06	0	0			0	(	0
**************************************		5"/62		5"/62		500			ea.	1.60E-02 2.	.00E-02		1.20E-03	9.30E-04		6.00E-06	0.004	0.005			0.000233	(	1.5
## PAPE   MATERIAL PAPE   MATE				5"/62 HECVT 5"/62 HEET					ea.	1.60E-02 2.	.00E-02		1.20E-03	9.30E-04		6.00E-06	0	0	C	0 0	0	(	0
# 14-14   18-1		60mm	AP-42	60MM		630			ea.	2.90E-01 3.	.00E-02		3.20E-02	1.70E-02		2.30E-04	0.09135	0.00945	0.001323	0.01008	0.005355	(	7.25
### PATH PATH PATH PATH PATH PATH PATH PATH	76mm			81MM HE		560			ea.	1.60E-02 2.	.00E-02	3 60E 04	1.20E-03	9.30E-04		6.00E-06	0.004032	0.00504	Č	0	0.000234	(	1.51
## AP - 1		CAS		GAU-17 30mm		2,906	i			1.30L-02 1.	.40L-02	3.00L-04	9.201-04	7.00L-04		1.302-00	0	0			0		
No.   Company   No.   Compan	GUNFIRE (s	mall) Al	MW 114,1125				)															(	0.002
# 14 - 1				30MM EFV Main Gun		15,750	)		ea.								0.002048	0.002756	0.0002835	0.000205	0.000181	(	0.00
# AP-04   CECK			AP-42 No Data	40MM HE 40MM ILL					ea.	6.60E-02 7. 2.60E-04 3.	.00E-03	1.60E-03 3.60E-05	1.30E-02 2.60E-05	6.60E-03 2.30E-05		7.30E-05 6.70E-04		0	,	·	0	(	0
# A-2			AP-42	.45 CAL					ea.	2.20E-04 2.	.60E-04	8.10E-06	3.70E-05	3.10E-05		1.20E-05	0	0	0	0 0	0	(	0
AN 20			AP-42	5.56 BLANK .50CAL		58,500			ea. ea.	2.30E-04 2. 5.10E-03 1.	.80E-04 .10E-02	2.00E-05 1.20E-03	6.90E-06 3.10E-04	2.00E-06 1.90E-04		9.70E-07 1.30E-05	0.149175	0.32175	Č	0	0.005558	(	0.0
# PAT 2   1				.50CAL BLANK		1 224			ea.	2.10E-03 1.	.80E-03	2.80E-05	9.80E-05	8.80E-05		1.20E-05	0.000734	0 0 0.001409	0.000059387	0 0 3.12F-05	0 0 2,33F-05	(	) 3
No Diago   10 Diago			AP-42	7.62 9MM		1,224			ea. ea.	1.20E-03 2. 2.00E-04 3.	.30E-03 .10E-04	9.70E-05 1.50E-05	5.10E-05 2.40E-05	3.80E-05 2.00E-05		4.90E-06 6.80E-06	0.000734	0	0.500059304	0 0	0	(	0
## Company   Part   Par			No Data	.223 Rifle Rounds					ea.	6.80E-05 7.	.20E-05	3.10E-06	2.60E-06	1.90E-06		1.80E-06	0	0	,		0	(	0
## PERFORM NAME				.22 Long Rifle 12 Guage Shotgun					ea.	6.80E-05 7.	.20E-05	3.10E-06	2.60E-06	1.90E-06		1.80E-06	0	0	C	0 0	0	(	0
SILE   Fig.	IINE SHAPI	E	AP-42	M18A1		82,674					.00E-02	1.80E-02	4.90E-02	2.60E-02		5.70E-05	0	0	C	0	0	(	)
AW 25  AW	Meon =			MK62 Total:		0			ea.	No emissions													
AW 25  AW 26  AW 26  AW 27  AW 27  AW 26  AW 26  AW 26  AW 27  AW 27  AW 27  AW 26  AW	MISSILE			AGM-65 Maverick		3 3			ea.														Ħ
AW 25    AW 25				AIM-120 AIM-7					ea.				_	_	_	_						_	E
AW 25    SSM				BGM-71E TOW-A HARM		2			ea.														Ħ
Tactical Tomahawk		AW 25		NSM JSOW					ea. ea.	_								_	_				E
SMC or equivalent   1				Tactical Tomahawk SLAM		1			ea.														F
275 RKT HE	יטכער־			SM2 or equivalent Total:		11			ea.	4 FOF C.	60F 07	7.405	64055	2005		4.00			_			_	
Total:	OCKET			2.75" RKT HE					ea.	4.50E-01 5.	.60E-02	7.10E-03	6.10E-02	3.80E-02		1.20E-03	0	0	0	0 0	0	(	0
Marker	LARES			Total: FLARES**		0																	
Total:	MOKE			Marker		8			ea.														+
REDO   NA   MK46									ea.	1 1.	.30E-02	1.20E-02	3.20E-02	1.70E-02	6.10E-05	3.80E-05	0.3695	0.004804	0.004434	0.011824	0.006282	2.25395E-05	5 1.4
NA MK46-REX-FLYN	ORPEDO		NA	MK46 MK46-HOVER		141			ea.														E
NA MK46-REX-LAMPS			NA NA	MK46-LAMPS MK-46-REX-FLYIN					ea. ea.				_	_		_						_	E
NA			NA	MK46-REX-LAMPS					ea.														
NA MK46-REX-SVTT			NA NA	MK50-REX-LAMPS REXTORP-46					ea. ea.														E
NA MK46-VLA NA RETORP NA MK48-DCAP NA MK48-DCAP NA MK48-BC NA MK48-STD NA MK58-STD NA MK54-STD NA MK54-STD NA MK54-STD SEARCH SEARCH NA MK54-STD SEARCH SEAR			NA	MK46-REX-SVTT					ea.														
NA MK48-ADCAP 1 ea.  NA MK48-ER ea.  NA MK48-STD ea.  NA MK48-STD ea.  STATE OF THE OF			NA NA	MK46-VLA REXTORP			<u>L</u>		ea.											<u>L</u>			F
NA MK54 ea.  Total: 1   ea.  GRAND TOTAL ROUNDS 27,612   CRAND TOTAL ROUNDS			NA NA	MK48-ADCAP MK48-ER		1			ea. ea.	_									_				
GRAND TOTAL ROUNDS 27,612 SQUARDS				MK54		<u> </u>																	
CRAND TOTAL ROUNDS						1 0																	F
NEW 12,625						27,612																	

Table C-8. Ordnance Expenditures—Alternative 1

		OTE: Units of let Explosive V		rounds are 1 each (ea.) and fo	or Demolitions	and Other	Ordnance :	are in pound:	S	Emiss	sion Facto	r (lb per l	b or lb per	item)				Emiss	sions, ton	s/year		
Ordnance	Group	AQ Data	Ordnance Type	Fate	Quantity Fired	Consolida ted Nos.	NEW ea.	UOM/ Cum NEW	CO2	со	Nox	PM10	PM2.5	SO2	Lead	CO2	со	Nox	PM10	PM2.5	SO2	Lead
вомв		No Data	CBU MK20 ROCKEYE GBU32I JDAM				99 385	ea.														
		No Data	LGTR MK76				0 Noa	ea.														
		No Data	BDU 48				Neg.	ea.														
			MK82 HE		18		192	ea.		0.3184						0	0.550195	0	0	0	0	0
		No Data	GBU12 500 lb		110		192	ea. ea.														
		No Data	BDU 45		110		0	ea.														
		No Data	MK83 HE		8		445	ea.		0.1482						0	0.263796	0	0	0	0	0
		No Data NA	GBU 16 MK83 INERT Total:		136		445 0	ea.														
OTHER OR		No AQ data	Туре		No.		NEW	574.0		0.0044	0.044				0.00004	0.04070	0.004057	0.0004440				4.45.05
	CNA	No Data	BLASTING CAP MK11		136 3,117		4.2 Neg.	571.2 0	1.2	0.0044	0.011				0.00004	0.34272	0.001257	0.0031416	0	0	0	1.14E-05
		No Data No Data	FIRING DEVICE Fuse Igniters		105 18,700 550		Neg.	0														
		No Bala	GRENADE SIMULATOR		000		0.0813	0.0	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	О	0	0	0	0
			Grenades		183		0.0813	14.9	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0.004687	0.000156	4.68654E-05	0.000156	0.000112	8.92674E-07	1.04E-06
		No Data	M1A2 BANGALORE TORP				10.00	0								0	0	0	0	0	0	0
			M7 BANDOLEER MK57 (Claymore mine)				8.16	0		0.15108						0	0	О	0	0	0	0
		AP-42 No Data	M112 DEMO CHARGE M700 BLASTING FUSE		1,143		1.20 0.001	1371.6 0	7.90E-01	2.60E-02	7.90E-03	2.60E-02	1.90E-02		1.70E-04	0.541782	0.017831	0.00541782	0.017831	0.01303	0	0.000117
		No Data	MK20 Cable Cutter				0.0028	0.0														
		No Data	MK22 Projectile Unit				Neg.	Neg.														
		No Data	MK36 M0 DEMO CHARGE				4.10	0								0	0	0	0	0	0	0
		No Data	MK75 CHARGE				50.00	0								0	0	0	0	0	0	0
		No Data	MK84 [86] EOD Shaped Charge		8		0.08	0.64								0	0	0	0	0	0	0
		No Data	MK120 NONELEC DET (ft)		]		0.00001	0.0000														
		No Data	MK123 NONELEC DET (ft)				0.00001	0.0000														
		No Data	MK138 DEMO CHG ASSEMBLY				20.00	0	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	0	0	0	0	0
		No Data	MK140 FLEXIBLE				0.04	0	1										-			1
		No Data	CHARGE MK174 PBXN-109 TEST Det Cord		972		0.0060	0														
		No Data	SIGNAL MK 18(G950) SMOKE				0.0060	0														
		No Data	C4 0.5 LB		4	3	0.50	2	6.30E-01	0.021		2.10E-02					0.000021	0.0000063	0.000021	0.000015	0.00000012	1.4E-07
		No Data No Data No Data	C4 2.5 LB C4 5 LB C4 20 LB		551 76		2.50 5.00 20.00	150 2755 1520	6.30E-01 6.30E-01 6.30E-01	0.021 0.021 0.021	6.30E-03	2.10E-02 2.10E-02 2.10E-02	1.50E-02		1.40E-04 1.40E-04 1.40E-04		0.001575 0.028928 0.01596	0.0004725 0.00867825 0.004788	0.001575 0.028928 0.01596	0.001125 0.020663 0.0114	0.000009 0.0001653 0.0000912	1.05E-05 0.000193 0.000106
		No Data No Data	C4 300 LB C4 500 LB		70		1.00	0	6.30E-01 6.30E-01	0.021		2.10E-02	1.50E-02	1.20E-04 1.20E-04	1.40E-04	0.4788	0.01390	0.004780	0.01390	0.0114	0.0000912	0.000100
		No Data No Data	TNT Blocks 0.5 lbd DEMO SHEET		1,192		1.00 6.00	0 7152		0.398						-	0				-	
		No Data No Data	DETONATING CORD DEMO CHARGE		36,667		0.006 5.00	220.002 0														
	_	AP-42	SIMULATED ARTILLERY  Totals		63,464		0.1375	0 13,757	6.30E-01	0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	0	0	0	0	0
GUNFIRE (I	Large)	AP-42	155MM HE		00,101			ea.	6.51	2.35E+01	1.43E+00	0.496	0.2418		2.26E-03	0	0	0	0	0	0	0
	5"/54	AP-42	155MM ILL 5"/54 BLP		1,351			ea.	1.8 1.60E-02	2.00E-02		1.20E-03			5.80E-05 6.00E-06	0.010808	0.01351	0	0.000811	0.000628	0	0 4.05E-06
			5"/54 HCVT+32 (EOD) 5"/54 HECVT					ea. ea.	1.60E-02 1.60E-02	2.00E-02		1.20E-03 1.20E-03	9.30E-04		6.00E-06	0	0	0	0	0	0	0
			5"/54 HEPD 5"/54 HEVT 5"/54 ILL					ea. ea.	1.60E-02 1.60E-02 1.50E-02	2.00E-02		1.20E-03 1.20E-03 9.20E-04	9.30E-04		6.00E-06 6.00E-06 1.30E-06	0	0	0	0	0	0	0 0
	5"/62		5"54/54 VTNF 5"/62		1,000			ea. ea.	1.60E-02 1.60E-02	2.00E-02 2.00E-02		1.20E-03 1.20E-03	9.30E-04 9.30E-04		6.00E-06 6.00E-06	0.008	0.01	0	0.0006	0.000465	0	0.000003
			5"/62 HE-MFF 5"/62 HECVT 5"/62 HEET					ea. ea. ea.	1.60E-02 1.60E-02 1.60E-02	2.00E-02		1.20E-03 1.20E-03 1.20E-03	9.30E-04		6.00E-06 6.00E-06 6.00E-06	0	0	0	0	0	0	0 0
	60mm	AP-42	5"/62 KEET 60MM		700			ea. ea.	1.60E-02 2.90E-01	2.00E-02 3.00E-02	4.20E-03	1.20E-03 3.20E-02	9.30E-04 1.70E-02		6.00E-06 2.30E-04	0.1015	0.0105	0.00147	0.0112	0.00595	0	0 8.05E-05
76mm		AP-42	60MM WP 76MM BLP 81MM HE		800			ea. ea. ea.	2.90E-01 1.44E-02 1.60E-02	1.80E-02		3.20E-02 1.08E-03 1.20E-03	8.37E-04		2.30E-04 5.40E-06 6.00E-06	0.00576 0.00576	0.0072	0	0.000432	0.000335	0	2.16E-06
	CAS	AP-42 No data	81MM ILL GAU-17 30mm					ea. ea.	1.50E-02		3.60E-04	9.20E-04			1.30E-06	Ö	0	Ö	0	0	0	0
GUNFIRE (	small) A	MW 114,1125	Total: 20MM		3,851 11,600			ea.	2.60E-04	3.50E-04	3.60E-05	2.60E-05	2.30E-05		6.70E-04	0.001508	0.00203	0.0002088	0.000151	0.000133	0	0.003886
		No Data	25MM 30MM EFV Main Gun		17,500			ea. ea.	2.60E-04	3.50E-04	3.60E-05	2.60E-05	2.30E-05		6.70E-04	0.002275	0.003063	0.000315	0.000228	0.000201	0	0.005863
		AP-42 AP-42	40MM 40MM HE					ea.	2.60E-04 6.60E-02	7.00E-03	1.60E-03	1.30E-02	2.30E-05 6.60E-03		6.70E-04 7.30E-05	0	0	0	0	0	0	0
		No Data AP-42 AP-42	40MM ILL 40MM PRACTICE .45 CAL					ea. ea.	2.60E-04 2.60E-04 2.20E-04	3.50E-04	3.60E-05	2.60E-05 2.60E-05 3.70E-05	2.30E-05 2.30E-05 3.10E-05		6.70E-04 6.70E-04 1.20E-05		0	0	0	0	0	0 0
		AP-42 AP-42	5.56 5.56 BLANK					ea. ea.	8.70E-04 2.30E-04	1.60E-03 2.80E-04	8.50E-05 2.00E-05	3.90E-05 6.90E-06	2.80E-05 2.00E-06		5.10E-06 9.70E-07	0	0	0	0	0	0	0
		AP-42 AP-42	.50CAL .50CAL .50CAL BLANK		65,000			ea. ea. ea.	5.10E-03 5.10E-03 2.10E-03	1.10E-02 1.10E-02 1.80E-03		3.10E-04 3.10E-04 9.80E-05	1.90E-04 1.90E-04 8.80E-05		1.30E-05 1.30E-05 1.20E-05	0.16575 0 0	0.3575 0 0	0.039 0	0.010075 0	0.006175 0	0	0.000423
		AP-42	7.62 7.62		1,360			ea.	1.20E-03 1.20E-03	2.30E-03 2.30E-03	9.70E-05 9.70E-05	5.10E-05 5.10E-05	3.80E-05 3.80E-05		4.90E-06 4.90E-06	0.000816	0.001564 0	0.00006596	3.47E-05 0	2.58E-05 0	0	3.33E-06
		AP-42 No Data No Data	9MM .300 WIN MAG .223 Rifle Rounds					ea. ea. ea.	2.00E-04 2.00E-04 6.80E-05	3.10E-04	1.50E-05 1.50E-05 3.10E-06	2.40E-05 2.40E-05 2.60E-06	2.00E-05 2.00E-05 1.90E-06		6.80E-06 6.80E-06 1.80E-06	0	0	0	0	0	0	0 0
		No Data No Data AP-42	.22 Magnum .22 Long Rifle					ea.	7.50E-05 6.80E-05	8.00E-05 7.20E-05	5.00E-06 3.10E-06	3.40E-06 2.60E-06	2.60E-06 1.90E-06		1.90E-06 1.80E-06	0	0	0	0	0	0	0 0
MINE SHAF	PΕ	AP-42	12 Guage Shotgur Total: M18A1		95,460			ea.	5.10E-03	1.10E-02 2.00E-02		3.10E-04 4.90E-02	1.90E-04 2.60E-02		1.30E-05 5.70E-05	0	0	0	0	0	0	0
		-	MK76 MK62					ea. ea.	No emissio			02										
MISSILE			Total: AGM-114B AGM-65 Maverick		0 2 6			ea. ea.														
			AGM-84 Harpoon AIM-120		6			ea. ea.														
			AIM-7 AIM-9 BQM74E		5 4			ea. ea. ea.														
	AW 25		HARM NSM		4			ea. ea.														
	AVV 25		JSOW Japanese Missile Tests					ea.						_							_	
			Seasparrow SLAM SM2 or equivalent		2 2			ea. ea.														
ROCKET			Total: 2.75" RKT 2.75" RKT HE		43			ea.	4.50E-01		7.10E-03 7.10E-03				1.20E-03	0	0	0	0	0	0	0
L			2.75" RKT HE 2.75" RKT I Total:		0			ea. ea.	4.50E-01 4.50E-01	5.60E-02 5.60E-02					1.20E-03 1.20E-03	0	0	0	0	0	0	0
FLARES SMOKE	_		FLARES** MK58 Marine Location		٥			ea.	1	1.30E-02	1,20F-02	3.20F-02	1.70F-02	6.10F-05	3.80F-05	0.004	0.000052	0.000048	0.000128	0.000068	0.000000244	1.52E-07
			Marker SMOKE GRENADE		787			ea.		1.30E-02							0.005116	0.00048		0.00669		1.52E-07
TORPEDO		NA	Total:		795			ea.	<u> </u>													
. 5 250		NA NA	MK46-HOVER MK46-LAMPS					ea. ea.														
		NA NA	MK-46-REX-FLYIN MK46-REX-HOVER					ea. ea.														
		NA NA	MK46-REX-LAMPS MK50-REX-FLYIN					ea.														
		NA NA NA	MK50-REX-LAMPS REXTORP-46 REXTORP-50					ea. ea. ea.														
		NA NA	MK46-REX-SVTT MK46-SVTT					ea. ea.														
		NA NA	MK46-VLA REXTORP					ea. ea.		_		_	_		_							
		NA NA NA	MK48-ADCAP MK48-ER MK48-STD		2			ea. ea.														
		NA NA	MK54 Total:		2			ea.														
			GRAND TOTAL ROUNDS		163,751																	
			GRAND TOTAL POUNDS		103,/51	<u>I</u>	<u> </u>	13,757											<u> </u>			
<u> </u>			NEW						1					NWTRC		l .		0.068381095	1			l

Table C-9. Ordnance Expenditures—Alternative 2

				e rounds are 1 each (ea.) and for	r Demolitions	s and Other	Ordnance a	are in pounds		ion Footor	(lb nor lb	or Ib nor	itam)				Emio	niono ton	o broom		
Ordnance		et Explosive V	Veight (NEW).  Ordnance Type	Fate	Quantity	Consolida	NEW ea.	UOM/ Cum	CO2 CO	Nox	(lb per lb	o or lb per PM2.5	so2	Lead	CO2	со	Emiss Nox	PM10	PM2.5	SO2	Lea
ВОМВ	0.0ар		CBU MK20 ROCKEYE	. 4.0	Fired	ted Nos.	99	NEW ea.	552   55	1102		12.0	302	2000	002	33	110%		1 111210	552	200
		No Data No Data	GBU32I JDAM LGTR				385 0	ea. ea.													
			MK76				Neg.	ea.													
		No Data	BDU 48				Neg.	ea.													
			MK82 HE		18	3	192	ea.	0.3184						0	0.550195	C	0	0	(	0
		No Data NA	GBU12 500 lb MK82 INERT		110	)	192 0	ea.													
		No Data	BDU 45				0	ea.													
		No Doto	MK83 HE GBU 16	,	8	3	445 445	ea.	0.1482						0	0.263796	C	0	0	(	0
		No Data NA	MK83 INERT Total		136	<del> </del>	0	ea.													
THER OR		No AQ data	Туре		No.		NEW														
	CNA	.P & SPAWAF No Data	BLASTING CAP MK11		149 3,117	7	4.2 Neg.	625.8	1.2 0.0044	0.011				0.00004	0.37548	0.001377	0.0034419	0	0	(	1.25
		No Data	FIRING DEVICE Fuse		105 18,700	5	Neg.	0													
		No Data	Igniters GRENADE SIMULATOR		550		Neg. 0.0813	0.0	6.30E-01 0.021	6.30F-03	2.10F-02	1.50E-02	1.20F-04	1.40F-04	0	0		) 0	0	(	)
			Grenades		183	3	0.0813	14.9		6.30E-03					0.004687	0.000156	4.68654E-05	0.000156	0.000112	8.92674E-07	7 1.04
		No Data	M1A2 BANGALORE TORP				10.00	0							0	0	C	0	0	(	0
			M7 BANDOLEER MK57																		
		AD 40	(Claymore mine) M112 DEMO CHARGE		4.440		8.16	0	0.15108		2.005.00	4.005.00		4 705 04	0.541782	0 047004	0.00541782	0 047004	0 04000	(	0.00
		AP-42 No Data	M700 BLASTING FUSE		1,143		1.20 0.001	1371.6 0	7.90E-01 2.60E-02	7.90E-03	2.00E-02	1.90E-02		1.70E-04	0.541762	0.017631	0.00341782	0.017631	0.01303		0.00
		No Data	MK20 Cable Cutter				0.0028	0.0													
		No Data	MK22 Projectile Unit				Neg.	Neg.													
		No Data	MK36 M0 DEMO CHARGE	+											0	0			0		1
		No Data		+			4.10	0							0	U	C	0	0		-
		No Data	MK75 CHARGE				50.00	0							0	0	C	0	0	(	0
		No Data	MK84 [86] EOD Shaped Charge		8	3	0.08	0.64							0	0	C	0	0	(	)
		No Data	MK120 NONELEC DET (ft)		_		0.00001	0.0000			_		_	_						_	
		No Data	MK123 NONELEC DET (ft)	<u> </u>			0.00001	0.0000													
		No Data	MK138 DEMO CHG				20.00	0	6.30E-01 0.021	6.30E-03	2.10E-02	1.50E-02	1.20F-∩4	1.40E-04	0	0	-	)	0	(	
			ASSEMBLY	<u> </u>					0.021									1			
		No Data	MK140 FLEXIBLE CHARGE MK174	<b></b>	972	2	0.04	0													
		No Data	PBXN-109 TEST Det Cord		912		0.0060	0													H
		No Data	SIGNAL MK 18(G950) SMOKE	<u> </u>			0.23	0											L		
		No Data No Data	C4 0.5 LB C4 2.5 LB		60	3	0.50 2.50	2 150	6.30E-01 0.021 6.30E-01 0.021	6.30E-03	2.10E-02	1.50E-02 1.50E-02	1.20E-04	1.40E-04	4.73E-02	0.000021 0.001575	0.0000063	0.001575		0.00000012	9 1.05
		No Data No Data	C4 5 LB C4 20 LB		551 76	6	5.00 20.00	2755 1520	6.30E-01 0.021 6.30E-01 0.021	6.30E-03	2.10E-02	1.50E-02 1.50E-02	1.20E-04	1.40E-04	0.867825 0.4788	0.028928	0.00867825 0.004788		0.020663 0.0114	0.0001653 0.0000912	
		No Data No Data No Data	C4 300 LB C4 500 LB TNT Blocks 0.5 lbd				1.00 1.00 1.00	0 0	6.30E-01 0.021 6.30E-01 0.021 0.398	6.30E-03		1.50E-02 1.50E-02			0	0	C	0 0	0	(	)
		No Data No Data	DEMO SHEET DETONATING CORD		1,192 36,667	2	6.00	7152 220.002	0.390												
		No Data	DEMO CHARGE SIMULATED ARTILLERY				5.00	0	0.005.04	0.005.00	0.405.00	4.505.00	4.005.04	4 405 04							
	_	AP-42	Totals	;	63,477	,	0.1375	0 <b>13,812</b>	6.30E-01 0.021	6.30E-03	2.10E-02	1.50E-02	1.20E-04	1.40E-04	0	0	C	0	0	(	
GUNFIRE (	(Large)	AP-42	155MM HE					ea.	6.51 2.35E+01	1.43E+00	0.496	0.2418		2.26E-03	0	0	C	0	0	(	0
	5"/54	AP-42	155MM ILL 5"/54 BLP		2,463	3		ea. ea.	1.60E-02 2.00E-02		1.20E-03	9.30E-04			0.019704	0.02463	C	0.001478	0.001145	(	7.39
			5"/54 HCVT+32 (EOD 5"/54 HECVT					ea.	1.60E-02 2.00E-02 1.60E-02 2.00E-02		1.20E-03 1.20E-03	9.30E-04 9.30E-04		6.00E-06	0	0	0	, ,	0	(	0
			5"/54 HEPD 5"/54 HEVT 5"/54 ILL					ea. ea.	1.60E-02 2.00E-02 1.60E-02 2.00E-02 1.50E-02 1.40E-02		1.20E-03 1.20E-03 9.20E-04	9.30E-04 9.30E-04 7.60E-04		6.00E-06 6.00E-06 1.30E-06	0	0	C	0	0	(	0
	5"/62		5"54/54 VTNF 5"/62		1,000	)		ea.	1.60E-02 2.00E-02 1.60E-02 2.00E-02		1.20E-03 1.20E-03	9.30E-04 9.30E-04		6.00E-06	0.008	0.01	C		0.000465	(	0.00
			5"/62 HE-MFF 5"/62 HECVT 5"/62 HEET					ea. ea. ea.	1.60E-02 2.00E-02 1.60E-02 2.00E-02 1.60E-02 2.00E-02		1.20E-03 1.20E-03 1.20E-03	9.30E-04 9.30E-04 9.30E-04		6.00E-06 6.00E-06 6.00E-06	0	0	C	0 0	0	(	0
	60mm	AP-42	5"/62 KEET		1,260	)		ea.	1.60E-02 2.00E-02		1.20E-03	9.30E-04 1.70E-02		6.00E-06 2.30E-04	0.1827	0.0189	0.002646	0 0.02016	0.01071	(	0.00
76mm			60MM WP 76MM BLP		1,120	)		ea.	2.90E-01 3.00E-02 1.44E-02 1.80E-02		1.08E-03	1.70E-02 8.37E-04		2.30E-04 5.40E-06	0.008064	0.01008	C	0.000605	0.000469	(	3.02
	CAS	AP-42 AP-42 No data	81MM HE 81MM ILL GAU-17 30mm					ea. ea.	1.60E-02 2.00E-02 1.50E-02 1.40E-02	3.60E-04	1.20E-03 9.20E-04	9.30E-04 7.60E-04		6.00E-06 1.30E-06	0	0	C	0 0	0	(	0
			Total:		5,843	В															
GUNFIRE (	(small) Al	MW 114,1125	20MM 25MM	-	23,200			ea.	2.60E-04 3.50E-04 2.60E-04 3.50E-04		2.60E-05	2.30E-05 2.30E-05		6.70E-04	0.003016	0.00406	0.0004176		0.000267	(	0.00
		No Data AP-42	30MM EFV Main Gun 40MM					ea. ea.	2.60E-04 3.50E-04	3.60E-05	2.60E-05	2.30E-05		6.70E-04	0	0	C	0	0	(	0
		AP-42 No Data AP-42	40MM HE 40MM ILL 40MM PRACTICE					ea. ea.	6.60E-02 7.00E-03 2.60E-04 3.50E-04 2.60E-04 3.50E-04	3.60E-05	1.30E-02 2.60E-05 2.60E-05	6.60E-03 2.30E-05 2.30E-05		7.30E-05 6.70E-04 6.70E-04	0	0	C	, ,	0	(	0
		AP-42 AP-42	.45 CAL 5.56					ea.	2.20E-04 2.60E-04 8.70E-04 1.60E-03	8.10E-06	3.70E-05 3.90E-05	3.10E-05 2.80E-05		1.20E-05 5.10E-06	0	0	C	0 0	0	(	0
		AP-42 AP-42	5.56 BLANK .50CAL		117,000	0		ea. ea.	2.30E-04 2.80E-04 5.10E-03 1.10E-02	2.00E-05 1.20E-03	6.90E-06 3.10E-04	2.00E-06 1.90E-04		9.70E-07 1.30E-05	0.29835	0.6435	0.0702	0.018135	0.011115	(	0.00
		AP-42 AP-42	.50CAL .50CAL BLANK 7.62		2,720			ea. ea.	5.10E-03 1.10E-02 2.10E-03 1.80E-03 1.20E-03 2.30E-03	1.20E-03 2.80E-05 9.70E-05	3.10E-04 9.80E-05 5.10E-05	1.90E-04 8.80E-05 3.80E-05		1.30E-05 1.20E-05 4.90E-06	0 0.001632	0.003138	0.00013192	0 0	0 5.17F-0F	(	0 6.66
		AP-42	7.62 9MM		2,720		<u> </u>	ea.	1.20E-03 2.30E-03 2.00E-04 3.10E-04	9.70E-05 1.50E-05	5.10E-05 2.40E-05	3.80E-05 2.00E-05		4.90E-06 6.80E-06	0	0.000128	C	0 0	0	(	0.00
		No Data No Data	.300 WIN MAG .223 Rifle Rounds					ea. ea.	2.00E-04 3.10E-04 6.80E-05 7.20E-05	1.50E-05 3.10E-06	2.40E-05 2.60E-06	2.00E-05 1.90E-06		6.80E-06 1.80E-06	0	0	C	0	0	(	oT ol
		No Data AP-42	.22 Magnum .22 Long Rifle 12 Guage Shotgun			1		ea. ea.	7.50E-05 8.00E-05 6.80E-05 7.20E-05 5.10E-03 1.10E-02	3.10E-06	3.40E-06 2.60E-06 3.10E-04	2.60E-06 1.90E-06 1.90E-04		1.90E-06 1.80E-06 1.30E-05	0 0	0	0	0 0	0	(	
IINE SHAI	PE	AP-42	Total: M18A1		174,420	)		ea.	1.6 2.00E-02					5.70E-05	0	0		0 0	0	(	0
			MK76 MK62			1		ea. ea.	No emissions												
MISSILE			Total: AGM-114B AGM-65 Maverick	<del></del>	2	2		ea.													
			AGM-84 Harpoon AIM-120		6	7		ea.													E
			AIM-7 AIM-9 BOM74E		13 9 16	-		ea. ea.													
	<b></b>		BQM74E HARM NSM		16 4		<b>!</b>	ea. ea.													
	AW 25		JSOW Japanese Missile Tests					ea.													E
			Seasparrow SLAM SM2 or equivalent		8	3		ea.													Ė
OCKET			SM2 or equivalent Total: 2.75" RKT	<u>.                                    </u>	2 <b>75</b>	i		ea.	4.50E-01 5.60E-02	7.10E-03	6,10F-02	3.80E-02		1.20E-03	^	0	-		0		
			2.75" RKT HE 2.75" RKT I					ea. ea.		7.10E-03	6.10E-02	3.80E-02 3.80E-02 3.80E-02		1.20E-03 1.20E-03	0	0	0	0 0	0		0
			Total: FLARES**		0			ea.													
LARES_			MK58 Marine Location Marker		8	3		ea.	1 1.30E-02	1.20E-02	3.20E-02	1.70E-02	6.10E-05	3.80E-05	0.004	0.000052	0.000048	0.000128	0.000068	0.000000244	4 1.5
					792			ea.	1 1.30E-02	1.20E-02	3.20E-02	1.70E-02	6.10E-05	3.80E-05	0.396	0.005148	0.004752	0.012672	0.006732	0.000024156	6 1.5
			SMOKE GRENADE		800	1		ea.										<del>                                     </del>	1		+
MOKE		NA NA	Total: MK46	<u> </u>				ea.	<b>+</b>												
MOKE		NA NA	Total: MK46 MK46-HOVER MK46-LAMPS					ea.													
MOKE		NA	Total: MK46 MK46-HOVER					ea. ea. ea.													
MOKE		NA NA NA NA NA NA	Total: MIK46 MIK46-HOVER MIK46-LAMPS MIK46-REX-FLYIN MIK46-REX-HOVER MIK46-REX-HOVER MIK46-REX-LAMPS MIK50-REX-FLYIN					ea. ea. ea. ea.													
MOKE		NA NA NA NA NA NA NA	Total: MK46 MK46-HOVER MK46-LAMPS MK-46-REX-FLYIN MK46-REX-HOVER MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-LYIN MK50-REX-LAMPS REXTORP-46 REXTORP-46					ea. ea. ea. ea. ea. ea.				_									
MOKE		NA N	Total: MK46 MK46-HOVER MK46-LAMPS MK-46-REX-FLYIN MK46-REX-HOVER MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-LAMPS MK50-REX-LAMPS REXTORP-46 REXTORP-50 MK46-REX-SVTT MK46-SVTT					ea.													
LARES MOKE		NA N	Total: MK46 MK46-HOVER MK46-HOVER MK46-LAMPS MK-46-REX-FLYIN MK46-REX-HOVER MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-LAMPS MK50-REX-LAMPS REXTORP-46 REXTORP-50 MK46-REX-SVTT MK46-VLA REXTORP MK46-REX-SVTT MK46-VLA REXTORP					ea.													
MOKE		NA	Total: MK46 MK46-HOVER MK46-LAMPS MK-46-REX-FLYIN MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-FLYIN MK50-REX-LAMPS REXTORP-46 REXTORP-46 REXTORP-50 MK46-REX-SVTT MK46-SVTT MK46-VLA		2			ea.													
MOKE		NA N	Total: MK46 MK46-HOVER MK46-HOVER MK46-REX-FLYIN MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-LAMPS MK50-REX-LAMPS MK50-REX-LAMPS REXTORP-46 REXTORP-50 MK46-REX-SVTT MK46-SVTT MK46-SVTT MK46-VLA REXTORP MK48-ADCAP MK48-ADCAP		2			ea.													
MOKE		NA N	Total: MK46 MK46-HOVER MK46-LAMPS MK-46-REX-FLYIN MK46-REX-HOVER MK46-REX-HOVER MK46-REX-HOVER MK46-REX-LAMPS MK50-REX-LAMPS REXTORP-86 REXTORP-86 REXTORP-86 REXTORP-80 MK46-REX-SVTT MK46-VLA REXTORP-MK46-MCAR-MCAR-MCAR-MCAR-MCAR-MCAR-MCAR-MCAR		2			ea.													
MOKE		NA N	Total:  MK46  MK46-HOVER  MK46-LAMPS  MK-46-REX-FLYIN  MK46-REX-HOVER  MK46-REX-HOVER  MK46-REX-HOVER  MK46-REX-LAMPS  REXTORP-46  REXTORP-46  REXTORP-50  MK46-REX-SVTT  MK46-VLA  REXTORP  MK46-SVTT  MK46-VLA  REXTORP  MK46-SVA  MK46-SVA  MK48-BCAP  MK48-BCAP  MK48-BCAP  MK48-STD  MK48-STD		2 2 2 2 2 2 4 4 , 7 5 3			ea.													

Table C-10. Ground Vehicle Emissions - No Action Alternative

Scenario	Type Training	ഴ Ground g Vehicles	Number	Engine Load	Hours per day		Emissio	ns Factors	(lb/hr)			Emis	ssions (lbs	)	
Training	Exercises					CO	NOx	HC	SOx	PM10	СО	Nox	НС	Sox	PM
1	Air Combat Maneuvers	None													
2	A-A Missiles	None													
3	S-A Gunnery Exercise	None													
4	S-A Missiles	None													
5	S-S GUNEX	None													
6	A-S BOMBEX	None													
7	SINKEX	None													
8	ASW TRACKEX - MPA	None													
9	EER-IEER	None													
10	Surface Ship ASW TRACKEX	None													
11	Sub ASW TRACKEX	None													
12	Elec Combat	None													
13	Mine Countermeasures Training	None													
14	Land Demolition Training	102 Pickup Trucks 12		1.0	8	0.30	0.03	0.02	0.00	0.00	2980.86	249.60	156.04	2.74	8.92
15	Insertion/Extraction	None													
16	NSW Training	None													
17	HARMEX	None													
18	ISR	None													
19	UAV	None													
						T. ( ) 0					1 100 10005	0.404=00	0.070046	0.0040=4	0.001175
	То	tai				Total Groun	na vehicle	∟missions,	tons		1.49043095	0.124799	U.U78018	0.001371	U.UU4458

Table C-11. Ground Vehicle Emissions - Alternative 1

Scenario	Type Training	Days Ground Number	Engine Load	Hours per day		Emissio	ns Factors	(lb/hr)			Emis	ssions (lbs	)	
Training	Exercises				СО	NOx	HC	SOx	PM10	СО	Nox	HC	Sox	PM
1	Air Combat Maneuvers	None												
2	A-A Missiles	None												
3	S-A Gunnery Exercise	None												
4	S-A Missiles	None												
5	S-S GUNEX	None												
6	A-S BOMBEX	None												
7	SINKEX	None												
8	ASW TRACKEX - MPA	None												
9	EER-IEER	None												
10	Surface Ship ASW TRACKEX	None												
11	Sub ASW TRACKEX	None												
12	Elec Combat	None												
13	Mine Countermeasures Training	None												
14	Land Demolition Training	110 Pickup Trucks 13	1.0	8	0.30	0.03	0.02	0.00	0.00	3482.54	291.61	182.30	3.20	10.42
15	Insertion/Extraction	None												
16	NSW Training	None												
17	HARMEX	None												
18	ISR	None												
19	UAV	None												
	То	tal			Total Grou	nd Vehicle	Emissions	, tons		1.74127146	0.145803	0.091149	0.001602	0.005208

Table C-12. Ground Vehicle Emissions - Alternative 2

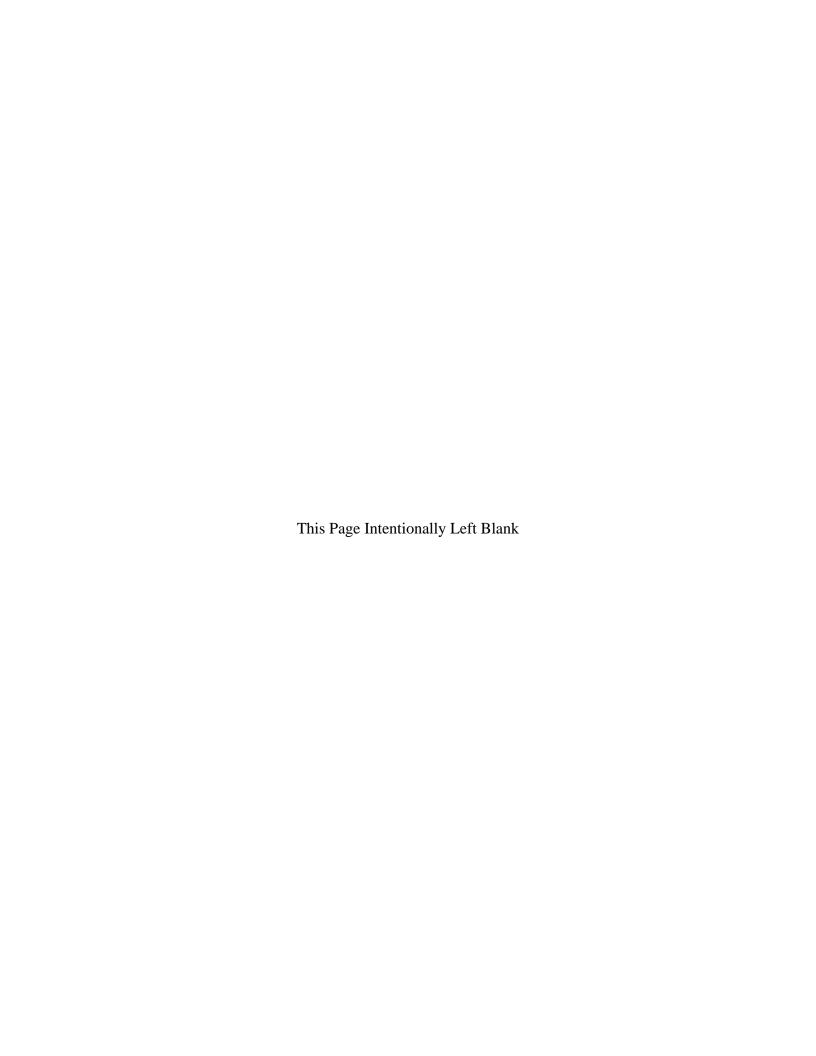
Scenario	Type Training	S Ground Vehicles	Number	Engine Load	Hours per day		Emissio	ns Factors	(lb/hr)			Emi	ssions (lbs	)	
Training						СО	NOx	HC	SOx	PM10	СО	Nox	НС	Sox	PM
1	Air Combat Maneuvers	None													
2	A-A Missiles	None													
3	S-A Gunnery Exercise	None													
4	S-A Missiles	None													
5	S-S GUNEX	None													
6	A-S BOMBEX	None													
7	SINKEX	None													
8	ASW TRACKEX - MPA	None													
9	EER-IEER	None													
10	Surface Ship ASW TRACKEX	None													
11	Sub ASW TRACKEX	None													
12	Elec Combat	None													
13	Mine Countermeasures Training	None													
14	Land Demolition Training	110 Pickup Trucks	13	1.0	8	0.30	0.03	0.02	0.00	0.00	3482.54	291.61	182.30	3.20	10.42
15	Insertion/Extraction	None													
16	NSW Training	None													
17	HARMEX	None													
18	ISR	None													
19	UAV	None													
	Tota	al				Total Groun	nd Vehicle	Emissions	, tons		1.74127146	0.145803	0.091149	0.001602	0.005208

Table C-13. Total Emissions within 3 nm of Shore

No Action Alternative	CO	NOx	НС	SOx	PM10	PM2.5
Aircraft-Operations	0.93	1.74	0.11	0.09	0.95	0.94
Surface Ships	1.33	3.07	0.12	0.56	0.08	0.08
Ordnance	0.92	0.06	0.00	0.00	0.09	0.09
Ground Vehicles	1.49	0.12	0.08	0.00	0.00	0.00
Total	4.67	5.00	0.31	0.66	1.13	1.12
Alternative 1						
Aircraft-Operations	1.02	1.86	0.12	0.10	1.03	1.02
Surface Ships	1.38	1.85	0.13	0.38	0.06	0.06
Ordnance	1.29	0.07	0.00	0.00	0.10	0.10
Ground Vehicles	1.74	0.15	0.09	0.00	0.01	0.01
Total	5.43	3.93	0.34	0.48	1.19	1.18
Alternative 2						
Aircraft-Operations	1.03	1.90	0.12	0.10	1.04	1.03
Surface Ships	1.38	1.85	0.13	0.38	0.06	0.06
Ordnance	1.60	0.10	0.00	0.00	0.12	0.12
Ground Vehicles	1.74	0.15	0.09	0.00	0.01	0.01
Total	5.76	3.99	0.34	0.48	1.23	1.22
Increases over Baseline						
Alternative 1	0.76	-1.07	0.02	-0.18	0.06	0.06
Alternative 2	1.09	-1.00	0.03	-0.18	0.10	0.10
Major Source Threshold	100.00	100.00	100.00	100.00	100.00	100.00
Alternative 1 Above?	NO	NO	NO	NO	NO	NO
Alternative 2 Above?	NO	NO	NO	NO	NO	NO

Table C-14. Total Emissions within U.S. Territory

No Action Alternative	СО	NOx	НС	SOx	PM10	PM2.5
Aircraft-Operations	1.35	3.68	0.21	0.19	1.87	1.85
Surface Ships	3.80	4.55	0.34	0.95	0.16	0.16
Ordnance	0.92	0.06	0.00	0.00	0.09	0.09
Ground Vehicles	1.49	0.12	0.08	0.00	0.00	0.00
Total	7.57	8.41	0.63	1.14	2.12	2.10
Alternative 1						
Aircraft-Operations	1.46	3.85	0.22	0.20	1.96	1.94
Surface Ships	4.06	3.45	0.36	0.80	0.15	0.15
Ordnance	1.29	0.07	0.00	0.00	0.10	0.10
Ground Vehicles	1.74	0.15	0.09	0.00	0.01	0.01
Total	8.55	7.52	0.67	1.00	2.22	2.20
Alternative 2						
Aircraft-Operations	1.49	3.95	0.23	0.20	2.01	1.99
Surface Ships	10.05	8.34	0.99	2.66	0.54	0.53
Ordnance	1.60	0.10	0.00	0.00	0.12	0.12
Ground Vehicles	1.74	0.15	0.09	0.00	0.01	0.01
Total	14.89	12.53	1.31	2.86	2.67	2.65
Increases over Baseline						
Alternative 1	0.98	-0.89	0.04	-0.14	0.10	0.10
Alternative 2	7.32	4.12	0.68	1.72	0.55	0.55
Major Source Threshold	100.00	100.00	100.00	100.00	100.00	100.00
Alternative 1 Above?	NO	NO	NO	NO	NO	NO
Alternative 2 Above?	NO	NO	NO	NO	NO	NO



# Appendix D

Marine Mammal Modeling

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#### D MARINE MAMMAL MODELING

#### D.1 BACKGROUND AND OVERVIEW

All marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the unauthorized take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.

The Endangered Species Act of 1973 (ESA) provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of their ecosystems. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future. There are marine mammals, already protected under MMPA, listed as either endangered or threatened under ESA, and afforded special protections.

Actions involving sound in the water include the potential to harass marine animals in the surrounding waters. Demonstration of compliance with MMPA and the ESA, using best available science, has been assessed using criteria and thresholds accepted or negotiated, and described here.

Sections of the MMPA (16 United States Code [U.S.C.] 1361 et seq.) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity, other than commercial fishing, within a specified geographical region. Through a specific process, if certain findings are made and regulations are issued, notice of a proposed authorization is provided to the public for review.

Authorization for incidental takings may be granted if the National Marine Fisheries Service (NMFS) finds that the taking will have no more than a negligible impact on the species or stock(s), will not have an immitigable adverse impact on the availability of the species or stock(s) for subsistence uses, and that the permissible methods of taking, and requirements pertaining to the mitigation, monitoring and reporting of such taking are set forth.

NMFS has defined negligible impact in 50 Code of Federal Regulations (CFR) 216.103 as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Subsection 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by harassment. The National Defense Authorization Act of 2004 (NDAA) (Public Law 108-136) removed the small numbers limitation and amended the definition of "harassment" as it applies to a military readiness activity to read as follows:

(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A Harassment]; or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].

The primary potential impact to marine mammals from underwater acoustics is Level B harassment from noise. For explosions of ordnance planned for use in the Northwest Training Range Complex (NWTRC), in the absence of any mitigation or monitoring measures, there is a very small chance that a marine mammal could be injured or killed when exposed to the energy generated from an explosive force.

Analysis of noise impacts is based on criteria and thresholds initially presented in U.S. Navy Environmental Impact Statements (EISs) for ship shock trials of the Seawolf submarine and the Winston Churchill (DDG 81), in EISs for the Southern California and Hawaii Range Complexes, and subsequently adopted by NMFS.

Non-lethal injurious impacts (Level A Harassment) are defined in those documents as tympanic membrane (TM) rupture and the onset of slight lung injury. The threshold for Level A Harassment corresponds to a 50-percent rate of TM rupture, which can be stated in terms of an energy flux density (EFD) value of 205 decibels (dB) re 1 micro Pascal squared–second ( $\mu$ Pa2-s). TM rupture is well-correlated with permanent hearing impairment. Ketten (1998) indicates a 30-percent incidence of permanent threshold shift (PTS) at the same threshold.

The criteria for onset of slight lung injury were established using partial impulse because the impulse of an underwater blast wave was the parameter that governed damage during a study using mammals, not peak pressure or energy (Yelverton, 1981). Goertner (1982) determined a way to calculate impulse values for injury at greater depths, known as the Goertner "modified" impulse pressure. Those values are valid only near the surface because as hydrostatic pressure increases with depth, organs like the lung, filled with air, compress. Therefore the "modified" impulse pressure thresholds vary from the shallow depth starting point as a function of depth.

The shallow depth starting points for calculation of the "modified" impulse pressures are mass-dependent values derived from empirical data for underwater blast injury (Yelverton, 1981). During the calculations, the lowest impulse and body mass for which slight, and then extensive, lung injury found during a previous study (Yelverton et al., 1973) were used to determine the positive impulse that may cause lung injury. The Goertner model is sensitive to mammal weight such that smaller masses have lower thresholds for positive impulse so injury and harassment will be predicted at greater distances from the source for them. Impulse thresholds of 13.0 and 31.0 pounds per square inch-millisecond (psi-msec), found to cause slight and extensive injury in a dolphin calf, were used as thresholds in the analysis contained in this document.

#### **D.1.1 Metrics for Physiological Effect Thresholds**

Effect thresholds used for acoustic impact modeling in this document are expressed in terms of EFD / Sound Exposure Level (SEL), which is total energy received over time in an area, or in terms of Sound Pressure Level (SPL), which is the level (root mean square) without reference to any time component for the exposure at that level. Marine and terrestrial mammal data show that, for continuous-type sounds of interest, Temporary Threshold Shift (TTS) and PTS are more closely related to the energy in the sound exposure than to the exposure SPL.

The Energy Level (EL) for each individual ping is calculated from the following equation:

$$EL = SPL + 10log_{10}(duration)$$

The EL includes both the ping SPL and duration. Longer-duration pings and/or higher-SPL pings will have a higher EL.

If an animal is exposed to multiple pings, the EFD in each individual ping is summed to calculate the total EL. Since mammalian Threshold Shift (TS) data show less effect from intermittent exposures compared to continuous exposures with the same energy (Ward, 1997), basing the effect thresholds on the total received EL is a conservative approach for treating multiple pings; in reality, some recovery will occur between pings and lessen the effect of a particular exposure. Therefore, estimates are conservative because recovery is not taken into account (given that generally applicable recovery times have not been

experimentally established) and as a result, intermittent exposures from sonar are modeled as if they were continuous exposures.

The total EL depends on the SPL, duration, and number of pings received. The TTS and PTS thresholds do not imply any specific SPL, duration, or number of pings. The SPL and duration of each received ping are used to calculate the total EL and determine whether the received EL meets or exceeds the effect thresholds. For example, the TTS threshold would be reached through any of the following exposures:

- A single ping with SPL = 195 dB re 1  $\mu$ Pa and duration = 1 second.
- A single ping with SPL = 192 dB re 1  $\mu$ Pa and duration = 2 seconds.
- Two pings with SPL = 192 dB re 1  $\mu$ Pa and duration = 1 second.
- Two pings with SPL = 189 dB re 1  $\mu$ Pa and duration = 2 seconds.

#### D.1.2 Derivation of an Effects Threshold Based on EFD

As described in detail in Section 3.9.2.1 of the NWTRC EIS, SEL (EFD level) exposure threshold established for onset-TTS is 195 dB re 1  $\mu$ Pa<sup>2</sup>-s. This result is corroborated by the short-duration tone data of Finneran et al. (2000, 2003) and the long-duration sound data from Nachtigall et al. (2003a, b). Together, these data demonstrate that TTS in small odontocetes is correlated with the received EL and that onset-TTS exposures are fit well by an equal-energy line passing through 195 dB re 1  $\mu$ Pa<sup>2</sup>-s. Absent any additional data for other species and being that it is likely that small odontocetes are more sensitive to the mid-frequency active/high-frequency active (MFA/HFA) frequency levels of concern, this threshold is used for analysis for all cetacea.

The PTS thresholds established for use in this analysis are based on a 20 dB increase in exposure EL over that required for onset-TTS. The 20 dB value is based on estimates from terrestrial mammal data of PTS occurring at 40 dB or more of TS, and on TS growth occurring at a rate of 1.6 dB/dB increase in exposure EL. This is conservative because: (1) 40 dB of TS is actually an upper limit for TTS used to approximate onset-PTS, and (2) the 1.6 dB/dB growth rate is the highest observed in the data from Ward et al. (1958, 1959). Using this estimation method (20 dB up from onset-TTS) for the NWTRC analysis, the PTS threshold for cetacea is 215 dB re  $1\mu$ Pa2-s.

The threshold levels for analyzing acoustic impacts to pinnipeds from MFA/HFA sonar are based on specific species data when available. For the Stellar sea lion and Northern fur seal, the California sea lion data was used. Morphologically, the Stellar sea lion, Northern fur seal, and California sea lion are related. They are "eared" seals (Family Otarridae w/external ear flaps), vice the true seals (Family Phocidae w/out external ear flaps) such as harbor seals. In addition, the habitats and natural history (foraging, breeding, etc) are similar between Stellar sea lion, Northern fur seal, and California sea lion. The threshold levels for pinnipeds are given below:

#### Level A Harassment (onset PTS)

- Stellar Sea Lion 226 dB re 1 μPa2 ·s
- Northern Fur Seal 226 dB re 1 μPa2 ·s
- California Sea Lion 226 dB re 1 μPa2 ·s
- Northern Elephant Seal 224 dB re 1 μPa2 ·s
- Harbor Seal 203 dB re 1 µPa2 ·s

Level B Harassment (onset TTS)

• Stellar Sea Lion 206 dB re 1 μPa2 ·s

- Northern Fur Seal 206 dB re 1 μPa2 ·s
- California Sea Lion 206 dB re 1 μPa2 ·s
- Northern Elephant Seal 204 dB re 1 μPa2 ·s
- Harbor Seal 183 dB re 1  $\mu$ Pa2 ·s

Level B (non-injurious) Harassment also includes a TTS threshold consisting of 182 dB maximum EFD level in any 1/3-octave band above 100 hertz (Hz) for toothed whales (e.g., dolphins). A second criterion, 23 psi, has recently been established by NMFS to provide a more conservative range for TTS when the explosive or animal approaches the sea surface, in which case explosive energy is reduced, but the peak pressure of 1  $\mu$ Pa2-s is not (Table D-1). NMFS applies the more conservative of these two.

There may be rare occasions when multiple successive explosions (MSE) are part of a static location event such as during Bombing Exercise (BOMBEX), Sinking Exercise (SINKEX), or Gunnery Exercise (GUNEX) (when using other than inert weapons). For MSEs, accumulated energy over the entire training time, not to exceed 24 hours, is the natural extension for energy thresholds since energy accumulates with each subsequent shot; this is consistent with the treatment of multiple arrivals in Churchill. For positive impulse, it is consistent with Churchill to use the maximum value over all impulses received.

For MSEs, the acoustic criterion for sub-TTS behavioral disturbance is used to account for behavioral effects significant enough to be judged as harassment, but occurring at lower sound energy levels than those that may cause TTS. The sub-TTS threshold is derived following the approach of the Churchill Final Environmental Impact Statement (FEIS) for the energy-based TTS threshold. The research on puretone exposures reported in Schlundt et al. (2000) and Finneran and Schlundt (2004) provided a threshold of 192 dB re 1  $\mu$ Pa2-s as the lowest TTS value. This value for pure-tone exposures is modified for explosives by (a) interpreting it as an energy metric, (b) reducing it by 10 dB to account for the time constant of the mammal ear, and (c) measuring the energy in 1/3 octave bands, the natural filter band of the ear. The resulting TTS threshold for explosives is 182 dB re 1  $\mu$ Pa²-s in any 1/3 octave band. As reported by Schlundt et al. (2000) and Finneran and Schlundt (2004), instances of altered behavior in the pure-tone research generally began five dB lower than those causing TTS. The sub-TTS threshold is therefore derived by subtracting 5 dB from the 182 dB re 1  $\mu$ Pa²-s in any 1/3 octave band threshold, resulting in a 177 dB re 1  $\mu$ Pa²-s (EL) sub-TTS behavioral disturbance threshold for MSE. Table D-1 lists the harassment thresholds for explosives.

Threshold Type (Explosives)

Sub-TTS Threshold for Multiple Successive Explosions (peak one-third octave energy)

Level B - Temporary Threshold Shift (TTS) (peak one-third octave energy)

Level B - Temporary Threshold Shift (TTS) (peak pressure)

Level A - Slight lung injury (positive impulse)

Level A - 50% Eardrum rupture (peak one-third octave energy)

Mortality - 1% Mortal lung injury (positive impulse)

31 psi-ms

Table D-1. Harassment Thresholds-Explosives

#### D.1.3 Derivation of a Behavioral Effect Threshold Based on SPL

Over the past several years, the Navy and NMFS have worked on developing alternative criteria to replace and/or to supplement the acoustic thresholds used in the past to estimate the probability of marine

mammals being behaviorally harassed by received levels of MFA and HFA sonar. The Navy continues working with the NMFS to refine a mathematically representative curve for assessment of behavioral effects modeling associated with the use of MFA/HFA sonar. As detailed in Section 3.9.2.1.8, the NMFS Office of Protected Resources made the decision to use a risk function and applicable input parameters to estimate the probability of behavioral responses that NMFS would classify as harassment for the purposes of the MMPA given exposure to specific received levels of MFA/HFA sonar. This decision was based on the recommendation of the two NMFS scientists, consideration of the independent reviews from six scientists, and NMFS MMPA regulations affecting the Navy's use of Surveillance Towed Array Sensor System Low-Frequency Active (SURTASS LFA) sonar (DoN, 2002; National Oceanic and Atmospheric Administration [NOAA], 2007).

The particular acoustic risk function developed by the Navy and NMFS is derived from a solution in Feller (1968) with input parameters modified by NMFS for MFA/HFA sonar for mysticetes, odontocetes, and pinnipeds. In order to represent a probability of risk in developing this function, the function would have a value near zero at very low exposures, and a value near one for very high exposures. One class of functions that satisfies this criterion is cumulative probability distributions, a type of cumulative distribution function. In selecting a particular functional expression for risk, several criteria were identified:

- The function must use parameters to focus discussion on areas of uncertainty;
- The function should contain a limited number of parameters;
- The function should be capable of accurately fitting experimental data; and
- The function should be reasonably convenient for algebraic manipulations.

As described in DoN 2001, the mathematical function below is adapted from a solution in Feller (1968).

$$R = \frac{1 - \left(\frac{L - B}{K}\right)^{-A}}{1 - \left(\frac{L - B}{K}\right)^{-2A}}$$

Where: R = risk (0 - 1.0);

L = Received Level (RL) in dB

B = basement RL in dB (120 dB)

K = the RL increment above basement in dB at which there is 50% risk

A = risk transition sharpness parameter (8 for mysticetes, 10 for all others)

It is important to note that the probabilities associated with acoustic modeling do not represent an individual's probability of responding; they identify the proportion of an exposed population (as represented by an evenly distributed density of marine mammals per unit area) that is likely to respond to an exposure. In addition, modeling does not take into account reductions from any of the Navy's standard protective mitigation measures which should significantly reduce or eliminate actual exposures that may have otherwise occurred during training.

#### D.2 ACOUSTIC SOURCES

The acoustic sources employed in the NWTRC are categorized as either broadband (producing sound over a wide frequency band) or narrowband (producing sound over a frequency band that that is small in comparison to the center frequency). In general, the narrowband sources in this exercise are Anti-Submarine Warfare (ASW) sonars and the broadband sources are explosives. This delineation of source types has a couple of implications. First, the transmission loss used to determine the impact ranges of narrowband ASW sonars can be adequately characterized by model estimates at a single frequency. Broadband explosives, on the other hand, produce significant acoustic energy across several frequency decades of bandwidth. Propagation loss is sufficiently sensitive to frequency as to require model estimates at several frequencies over such a wide band.

Second, the types of sources have different sets of harassment metrics and thresholds. Energy metrics are defined for both types. However, explosives are impulsive sources that produce a shock wave that dictates additional pressure-related metrics (peak pressure and positive impulse). Detailed descriptions of both types of sources are provided in the following subsections.

#### D.2.1 Sonars

Operations in the NWTRC involve five types of narrowband sonars. Harassment estimates are calculated for each sonar according to the manner in which it operates. For example, the SQS-53C is a hull-mounted, surface ship sonar that operates for many hours at a time, so it is useful to calculate and report SQS-53C harassments per hour of operation. The AN/SSQ-62 is a sonobuoy that is dropped into the water from an aircraft or helicopter and pings about 10 to 30 times in an hour. For the AN/SSQ-62, it is most helpful to calculate and report exposures per sonobuoy. For the MK-48 torpedo, the sonar is modeled for a typical training event and the MK-48 reporting metric is the number of torpedo runs. Table D-2 presents the deploying platform, frequency class, and the reporting metrics for each narrow-band sonar used in the NWTRC.

Sonar	Description	Frequency Class	Exposures Reported	Units per Hour
MK-48	Torpedo sonar	High-frequency	Per torpedo	One torpedo run
AN/SQS-53C	Surface ship sonar	Mid-frequency	Per hour	120 sonar pings
AN/SQS-56	Surface ship sonar	Mid-frequency	Per hour	120 sonar pings
AN/SSQ-62	Sonobuoy sonar	Mid-frequency	Per sonobuoy	8 sonobuoys
AN/SSQ-125	Sonobuoy sonar	Mid-frequency	Per sonobuoy	Unknown
AN/BQS-15	Submarine sonar	High-frequency	Per hour	Varies

Table D-2. Active Sonars Employed in NWTRC

Note that MK-48 source described here is the active pinger on the torpedo; the explosive source of the detonating torpedo is described in the next subsection.

The acoustic modeling that is necessary to support the harassment estimates for each of these sonars relies on a generalized description of the manner of the sonar's operating modes. This description includes the following:

- "Effective" energy source level—This is the level relative to 1  $\mu$ Pa<sup>2</sup>-s of the integral over frequency and time of the square of the pressure and is given by the total energy level across the band of the source, scaled by the pulse length (10 log<sub>10</sub> [pulse length]).
- Source depth—Depth of the source in meters.

- Nominal frequency—Typically the center band of the source emission. These are frequencies that have been reported in open literature and are used to avoid classification issues. Differences between these nominal values and actual source frequencies are small enough to be of little consequence to the output impact volumes.
- Source directivity—The source beam is modeled as the product of a horizontal beam pattern and a vertical beam pattern. Two parameters define the horizontal beam pattern:
  - Horizontal beam width—Width of the source beam (degrees) in the horizontal plane (assumed constant for all horizontal steer directions).
  - Horizontal steer direction—Direction in the horizontal in which the beam is steered relative to the direction in which the platform is heading.

The horizontal beam is assumed to have constant level across the width of the beam with flat, 20-dB down sidelobes at all other angles.

Similarly, two parameters define the vertical beam pattern:

- Vertical beam width—Width of the source beam (degrees) in the vertical plane measured at the 3-dB down point (assumed constant for all vertical steer directions).
- Vertical steer direction—Direction in the vertical plane that the beam is steered relative to the horizontal (upward looking angles are positive).

To avoid sharp transitions that a rectangular beam might introduce, the power response at vertical angle  $\theta$  is

Power = max 
$$\{ \sin^2 \left[ n(\theta_s - \theta) \right] / \left[ n \sin \left( \theta_s - \theta \right) \right]^2, 0.01 \},$$

where  $\theta_s$  is the vertical beam steer direction, and  $n=2*L/\lambda$  (L= array length,  $\lambda=$  wavelength).

The beamwidth of a line source is determined by n (the length of the array in half-wavelengths) as  $\theta_w = 180^{\circ}/n$ .

• Ping spacing—Distance between pings. For most sources this is generally just the product of the speed of advance of the platform and the repetition rate of the sonar. Animal motion is generally of no consequence as long as the source motion is greater than the speed of the animal (nominally, 3 knots). For stationary (or nearly stationary) sources, the "average" speed of the animal is used in place of the platform speed. The attendant assumption is that the animals are all moving in the same constant direction.

Many of the actual parameters and capabilities of these sonars are classified. Parameters used for modeling were derived to be as representative as possible taking into account the manner with which the sonar would be used in various training scenarios. However, when there was a wide range of potential modeling input values, the default was to model using a nominal parameter likely to result in the most impact, so that the model would err towards the maximum potential exposures.

For the sources that are essentially stationary (AN/SSQ-62), emission spacing is the product of the ping cycle time and the average animal speed.

#### **D.2.2 Explosives**

Explosives detonated underwater introduce loud, impulsive, broadband sounds into the marine environment. Three source parameters influence the effect of an explosive: the weight of the explosive

material, the type of explosive material, and the detonation depth. The net explosive weight (or NEW) accounts for the first two parameters. The NEW of an explosive is the weight of TNT required to produce an equivalent explosive power.

The detonation depth of an explosive is particularly important due to a propagation effect known as surface-image interference. For sources located near the sea surface, a distinct interference pattern arises from the coherent sum of the two paths that differ only by a single reflection from the pressure-release surface. As the source depth and/or the source frequency decreases, these two paths increasingly, destructively interfere with each other, reaching total cancellation at the surface (barring surface-reflection scattering loss). For the NWTRC there are three types of explosive sources: AN/SSQ-110 Extended Echo Ranging (EER) sonobuoys, demolition charges, and munitions (MK-48 torpedo, Maverick, Harpoon, HARM, HELLFIRE and SLAM missiles, MK-82, MK-83, MK-84, GBU-10, GBU-12 and GBU-16 bombs, 5-inch rounds and 76 mm gunnery rounds). The EER source can be detonated at several depths within the water column. For this analysis a relatively shallow depth of 20 meters is used to optimize the likelihood of the source being positioned in a surface duct. Demolition charges are typically modeled as detonating near the bottom. For a SINKEX the demolition charge would be on the hull. The MK-48 detonates immediately below the hull of its target (nominally 50 feet). A source depth of 2 meters is used for bombs and missiles that do not strike their target. For the gunnery rounds, a source depth of 1 foot is used. The NEWs for these sources are as follows:

- EER Source—5 pounds
- Demolition charge—10 pounds in Explosive Ordnance Disposal (EOD), 100 pounds in a sinking exercise (SINKEX)
- MK-48—851 pounds
- Maverick—78.5 pounds
- Harpoon—448 pounds
- HARM—41.6 pounds
- HELLFIRE—16.4 pounds
- SLAM—164.25 pounds
- MK-82—238 pounds
- GBU-10—945 pounds
- GBU-12—238 pounds
- GBU-16—445 pounds
- 5-inch rounds—9.54 pounds
- 76 mm rounds—1.6 pounds

The exposures expected to result from these sources are computed on a per in-water explosive basis. The cumulative effect of a series of explosives can often be derived by simple addition if the detonations are spaced widely in time or space, allowing for sufficient animal movements as to ensure a different population of animals is considered for each detonation. There may be rare occasions when MSEs are part of a static location event. For these events, the Churchill FEIS approach was extended to cover events occurring at the same location. For MSE exposures, accumulated energy over the entire training time is the natural extension for energy thresholds since energy accumulates with each subsequent shot; this is consistent with the treatment of multiple arrivals in Churchill. For positive impulse, it is consistent with the Churchill FEIS to use the maximum value over all impulses received.

For MSEs, the acoustic criterion for sub-TTS behavioral disturbance is used to account for behavioral effects significant enough to be judged as harassment, but occurring at lower sound energy levels than those that may cause TTS.

A special case in which simple addition of the harassment estimates may not be appropriate is addressed by the modeling of a "representative" SINKEX. In a SINKEX, a decommissioned surface ship is towed to a specified deep-water location and there used as a target for a variety of weapons. Although no two SINKEXs are ever the same, a representative case derived from past exercises is described in the *Programmatic SINKEX Overseas Environmental Assessment* (March 2006) for the Western North Atlantic.

In a SINKEX, weapons are typically fired in order of decreasing range from the source, with weapons fired until the target is sunk. A torpedo is used after all munitions have been expended if the target is still afloat. Since the target may sink at any time during the exercise, the actual number of weapons used can vary widely. In the representative case, however, all of the ordnances are assumed expended; this represents the worst case with maximum exposure. The sequence of weapons firing for the representative SINKEX is described in Table D-3.

Time (Local)	Event Description
0900	Range Control Officer receives reports that the exercise area is clear of non-participant ship traffic, marine mammals, and sea turtles.
0910	2 HARM missiles fired, both hit target (5 minutes apart).
0925	3 Harpoon missiles fired, all hit target (1 minute apart).
0945	1 SLAM-ER missile fired, hits target.
1030	Surface gunfire commences – 500 five-inch rounds fired (one every 6 seconds), 350 hit target, 150 miss target. 200 76-mm rounds fired, 140 hit target, 60 miss.
1200	1 Hellfire missile fired, hits target.
1230	3 Maverick missiles fired, 2 hit target, 1 misses (5 minutes apart).
1330	4 live GBU-12 bombs dropped – 3 hit target, 1 misses target (2 minutes apart). 4 live GBU-16 bombs dropped – 3 hit target, 1 misses target (2 minutes apart). 4 live GBU-10 bombs dropped – 3 hit target, 1 misses target (2 minutes apart).
1500	MK 48 Torpedo fired, hits, and does not sink target.
1700	Underwater demolition to sink target.

Table D-3. Representative SINKEX Weapons Firing Sequence

Guided weapons are nearly 100% accurate and are modeled as hitting the target (that is, no underwater acoustic effect) in all but two cases: (1) the Maverick is modeled as a miss to represent the occasional miss, and (2) the MK-48 torpedo intentionally detonates in the water column immediately below the hull of the target. Unguided weapons are more frequently off-target and are modeled according to the statistical hit/miss ratios. Note that these hit/miss ratios are artificially low in order to demonstrate a worst-case scenario; they should not be taken as indicative of weapon or platform reliability.

#### D.3 ENVIRONMENTAL PROVINCES

Propagation loss ultimately determines the extent of the Zone of Influence (ZOI) for a particular source activity. In turn, propagation loss as a function of range responds to a number of environmental parameters:

- Water depth
- Sound speed variability throughout the water column

- Bottom geo-acoustic properties, and
- Surface roughness, as determined by wind speed

Due to the importance that propagation loss plays in ASW, the Navy has, over the last four to five decades, invested heavily in measuring and modeling these environmental parameters. The result of this effort is the following collection of global databases of these environmental parameters, which are accepted as standards for Navy modeling efforts.

- Water depth—Digital Bathymetry Data Base Variable Resolution (DBDBV)
- Sound speed—Generalized Digital Environmental Model (GDEM)
- Bottom loss—Low-Frequency Bottom Loss (LFBL), Sediment Thickness Database, and High-Frequency Bottom Loss (HFBL), and
- Wind speed—U.S. Navy Marine Climatic Atlas of the World

This section provides a discussion of the relative impact of these various environmental parameters. These examples then are used as guidance for determining environmental provinces (that is, regions in which the environmental parameters are relatively homogeneous and can be represented by a single set of environmental parameters) within the NWTRC.

## **D.3.1 Impact of Environmental Parameters**

Within a typical operating area, the environmental parameter that tends to vary the most is bathymetry. It is not unusual for water depths to vary by an order of magnitude or more, resulting in significant impacts on the ZOI calculations. Bottom loss can also vary considerably over typical operating areas, but its impact on ZOI calculations tends to be limited to waters on the continental shelf and the upper portion of the slope. Generally, the primary propagation paths in deep water, from the source to most of the ZOI volume, do not involve any interaction with bottom. In shallow water, particularly if the sound velocity profile directs all propagation paths to interact with the bottom, bottom loss variability can play a larger role.

The spatial variability of the sound speed field is generally small over operating areas of typical size. The presence of a strong oceanographic front is a noteworthy exception to this rule. To a lesser extent, variability in the depth and strength of a surface duct can be of some importance. In the mid-latitudes, seasonal variation often provides the most significant variation in the sound speed field. For this reason, both summer and winter profiles are modeled for each selected environment.

## **D.3.2 Environmental Provincing Methodology**

The underwater acoustic environment can be quite variable over ranges in excess of 10 kilometers (km). For ASW applications, ranges of interest are often sufficiently large as to warrant the modeling of the spatial variability of the environment. In the propagation loss calculations, each of the environmental parameters is allowed to vary (either continuously or discretely) along the path from acoustic source to receiver. In such applications, each propagation loss calculation is conditioned upon the particular locations of the source and receiver.

On the other hand, the range of interest for marine animal harassment by most Naval activities is more limited. This reduces the importance of the exact location of source and marine animal and makes the modeling required more manageable in scope.

In lieu of trying to model every environmental profile that can be encountered in an operating area, this effort utilizes a limited set of representative environments. Each environment is characterized by a fixed water depth, sound velocity profile, and bottom loss type. The operating area is then partitioned into homogeneous regions (or provinces), and the most appropriately representative environment is assigned to each. This process is aided by some initial provincing of the individual environmental parameters. The

Navy-standard high-frequency bottom loss database in its native form is globally partitioned into nine classes. Low-frequency bottom loss is likewise provinced in its native form, although it is not considered in the process of selecting environmental provinces. Only the broadband sources produce acoustic energy at the frequencies of interest for low-frequency bottom loss (typically less than 1 kHz); even for those sources the low-frequency acoustic energy is secondary to the energy above 1 kHz. The Navy-standard sound velocity profiles database is also available as a provinced subset. Only the Navy-standard bathymetry database varies continuously over the world's oceans. However, even this environmental parameter is easily provinced by selecting a finite set of water depth intervals. For this analysis "octave-spaced" intervals (10, 20, 50, 100, 200, 500, 1,000, 2,000, and 5,000 meters) provide an adequate sampling of water depth dependence.

ZOI volumes are then computed using propagation loss estimates derived for the representative environments. Finally, a weighted average of the ZOI volumes is taken over all representative environments; the weighting factor is proportional to the geographic area spanned by the environmental province.

The selection of representative environments is subjective. However, the uncertainty introduced by this subjectivity can be mitigated by selecting more environments and by selecting the environments that occur most frequently over the operating area of interest.

As discussed in the previous subsection, ZOI estimates are most sensitive to water depth. Unless otherwise warranted, at least one representative environment is selected in each bathymetry province. Within a bathymetry province, additional representative environments are selected as needed to meet the following requirements.

- In shallow water (less than 1,000 meters), bottom interactions occur at shorter ranges and more frequently; thus significant variations in bottom loss need to be represented.
- Surface ducts provide an efficient propagation channel that can greatly influence ZOI estimates. Variations in the mixed layer depth need to be accounted for if the water is deep enough to support the full extent of the surface duct.

Depending upon the size and complexity of the operating area, the number of environmental provinces tends to range from 5 to 20.

# **D.3.3 Description of Environmental Provinces**

The NWTRC encompasses a large area off the U.S. West Coast. For this analysis, the general operating area is bounded to the north and south by 48° 30' N and 40° N and to the west by meridian of 130° W and to the east by land. Within this large region a sub-area used for SINKEX operations is defined by the following additional restrictions:

- More than 50 nautical miles (nm) from land, and
- Water depth greater than 1,000 fathoms (1,852 meters).

Some of the active sonars are limited to Warning Area 237 (W-237), an irregularly-shaped region with the following vertices:

48° 21' 03" N 130° 00' 00" W 48° 20' 00" N 128° 00' 00" W 48° 08' 59" N 125° 55' 00" W 46° 32' 00" N 126° 42' 00" W 45° 50' 00" N 128° 10' 00" W The surface ship sonars are deployed throughout the general operating area. The air-deployed sonars, including the AN/SSQ-110, are limited to W-237. The explosive sources and demolition charges are limited to the SINKEX subarea.

This subsection describes the representative environmental provinces selected for the NWTRC. For all of these provinces, the average winter wind speed is 14 knots, whereas the average summer wind speed is 8 knots.

The general operating area of the NWTRC contains a total of 47 distinct environmental provinces. These represent various combinations of nine bathymetry provinces, four Sound Velocity Profile (SVP) provinces, and six HFBL classes. Among these 47 provinces, some share important characteristics while others occur infrequently, so the provinces were reduced to a generalized class of 16 fundamental provinces.

The bathymetry provinces represent depths ranging from very shallow to typical deep-water depths. However, nearly 90% of the NWTRC is characterized as deep-water (depths of 1,000 meters or more). The distribution of the bathymetry provinces over the NWTRC is provided in Table D-4.

Four SVP provinces describe the sound speed field in the NWTRC; however, only two (provinces 30 and 35) make any significant contribution to the analysis. The variability among the four provinces is relatively small as demonstrated by the summer profiles presented in Figure D-1. The dominant difference among the profiles is the relative strength of a suppressed secondary sound channel. This feature is most clearly in the two dominant provinces.

Table D-4. Distribution of Bathymetry Provinces in NWTRC

Province Depth (m)	Frequency of Occurrence
10	0.32 %
20	0.68 %
50	2.24 %
100	3.71 %
200	3.12 %
500	3.00 %
1,000	4.55 %
2,000	55.48 %
5,000	26.90 %

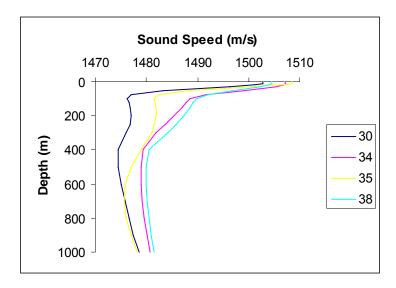


Figure D-1. Summer SVPs in NWTRC

The variation in the winter SVPs among the provinces is a bit more pronounced (Figure D-2). All four provinces display a surface duct but the two dominant provinces have a much deeper mixed layer (as much as 350 meters). This feature provides an efficient propagation channel when source and receiver are both located above the mixed layer.

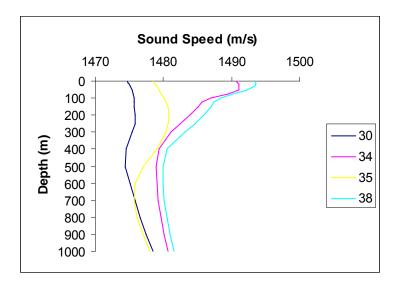


Figure D-2. Winter SVPs in NWTRC

The distribution of the SVP provinces across the NWTRC is provided in Table D-5.

Table D-5. Distribution of SVP Provinces in NWTRC

SVP Province	Frequency of Occurrence
30	87.39 %
34	0.78 %
35	11.53 %
38	0.30 %

The six HFBL classes represented in the NWTRC range from low-loss bottoms (class 2 and 3) to high-loss bottoms (classes 7 and 8). The distribution of HFBL classes summarized in Table D-6 indicates that both low- and high-loss classes are approximately equally distributed.

 HFBL Class
 Frequency of Occurrence

 2
 23.60 %

 3
 6.15 %

 4
 21.79 %

 6
 18.20 %

 7
 2.26 %

 8
 28.00 %

Table D-6. Distribution of High-Frequency Bottom Loss Classes in NWTRC

The logic for consolidating the environmental provinces focuses on water depth, using the sound speed profile (in deep water) and the HFBL class (in shallow water) as secondary differentiating factors. The first consideration was to ensure that all nine bathymetry provinces are represented. Then within each bathymetry province further partitioning of provinces proceeded as follows:

- The four shallowest bathymetry provinces are each represented by one environmental province. In each case, the bathymetry province is dominated by a single, low-loss bottom, so that the secondary differentiating environmental parameter is of no consequence.
- The 200- and 500-meter bathymetry provinces each consist of two environmental provinces in order to reflect both low- and high-loss bottoms that are prevalent at these depths. The 1,000-meter bathymetry province includes only high-loss bottoms and therefore does not need to be partitioned
- The 2,000-meter bathymetry province contains negligible variability in sound speed profiles. However, the 2,000-meter bathymetry province is significantly large as to warrant some partitioning based upon bottom loss. This bathymetry province is subdivided into three environmental provinces using HFBL classes 4, 6 and 8.
- The 5,000-meter bathymetry province is also a prevalent water depth in the NWTRC. For this analysis, it is partitioned into four environment provinces to capture both SVP province (30 and 35), and bottoms that are low-loss (HFBL classes 2 and 3) and high-loss (HFBL class 7).

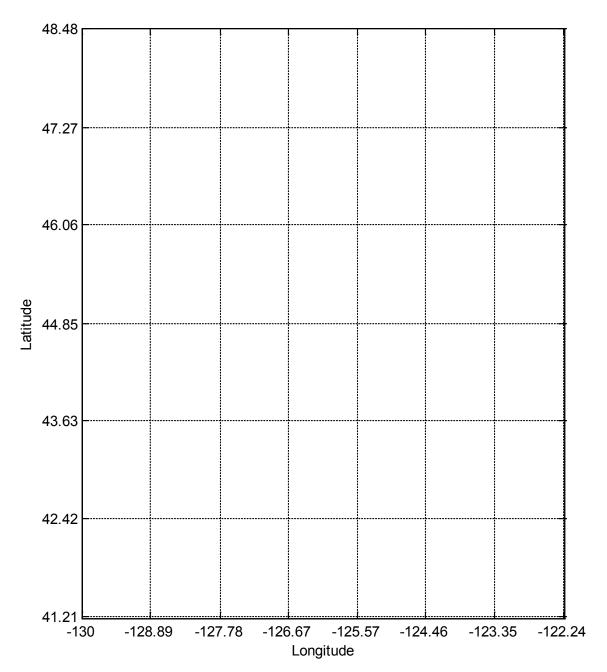
The resulting 16 environmental provinces used in the NWTRC acoustic modeling are described in Table D-7.

The percentages given in the preceding table indicate the frequency of occurrence of each environmental province across the general operating area in the NWTRC. Geographically, the distribution of these 16 environmental provinces is exhibited in Figure D-3.

Table D-7. Distribution of Environmental Provinces in General OPAREA of NWTRC

Environmental Province	Water Depth	SVP Province	HFBL Class	LFBL Province	Sediment Thickness	Frequency of Occurrence
1	10 m	30	2	0	0.2 secs	0.324%
2	20 m	30	2	0	0.2 secs	0.688%
3	50 m	30	2	0	0.27 secs	2.268%
4	100 m	30	2	<b>– 10</b>	0.41 secs	3.751%
5	200 m	30	2	- 10 <sup>*</sup>	0.33 secs	2.577%
6	200 m	30	8	- 10 <sup>*</sup>	0.62 secs	0.582%
7	500 m	30	8	14	0.31 secs	2.484%
8	500 m	30	2	<b>–</b> 10	0.23 secs	0.550%
9	1,000 m	30	8	14	0.21 secs	4.605%
10	2,000 m	30	4	18	0.82 secs	29.627%
11	2,000 m	30	8	18	0.41 secs	15.460%
12	2,000 m	30	6	19	0.2 secs	11.026%
13	5,000 m	30	2	14	0.74 secs	8.396%
14	5,000 m	35	3	18	0.36 secs	3.960%
15	5,000 m	30	7	14	0.88 secs	7.815%
16	5,000 m	35	7	18	0.29 secs	5.886%

<sup>\*</sup> Negative province numbers indicate shallow water provinces



Note: the northwestern coast of the United States is in blue, and higher province index numbers correspond to redder colors. The white polygon represents W-237.

Figure D-3. NWTRC Environmental Provinces over OPAREA

The distribution of the environments within the SINKEX area is, by definition, limited to the two deepest bathymetry provinces as indicated in Table D-8.

Table D-8. Distribution of Environmental Provinces within SINKEX Area

Environmental Province	Frequency of Occurrence	
10	38.48 %	
11	13.92 %	
12	14.21 %	
13	9.67 %	
14	5.13 %	
15	9.19 %	
16	9.40 %	

The air-deployed sonars are also restricted in their use. They are limited to W-237 for which the distribution of provinces is provided in Table D-9.

Table D-9. Distribution of Environmental Provinces within W-237

<b>Environmental Province</b>	Frequency of Occurrence	
5	1.112 %	
6	0/015 %	
7	0.846 %	
8	0.395 %	
9	3.111 %	
10	71.883 %	
11	7.976 %	
12	14.662 %	

#### D.4 IMPACT VOLUMES AND IMPACT RANGES

Many naval actions include the potential to injure or harass marine animals in the neighboring waters through noise emissions. The number of animals exposed to potential harassment in any such action is dictated by the propagation field and the characteristics of the noise source.

The impact volume associated with a particular activity is defined as the volume of water in which some acoustic metric exceeds a specified threshold. The product of this impact volume with a volumetric animal density yields the expected value of the number of animals exposed to that acoustic metric at a level that exceeds the threshold. The acoustic metric can either be an energy term (EFD, either in a limited frequency band or across the full band) or a pressure term (such as peak pressure or positive impulse). The thresholds associated with each of these metrics define the levels at which half of the animals exposed will experience some degree of harassment (ranging from behavioral change to mortality).

Impact volume is particularly relevant when trying to estimate the effect of repeated source emissions separated in either time or space. Impact range, which is defined as the maximum range at which a

particular threshold is exceeded for a single source emission, defines the range to which marine mammal activity is monitored in order to meet mitigation requirements.

With the exception of explosive sources, the sole relevant measure of potential harm to the marine wildlife due to sonar is the accumulated (summed over all source emissions) EFD received by the animal over the duration of the activity. Harassment measures for explosive sources include EFD and pressure-related metrics (peak pressure and positive impulse).

Regardless of the type of source, estimating the number of animals that may be injured or otherwise harassed in a particular environment entails the following steps.

Each source emission is modeled according to the particular operating mode of the sonar. The "effective" energy source level is computed by integrating over the bandwidth of the source, scaling by the pulse length, and adjusting for gains due to source directivity. The location of the source at the time of each emission must also be specified.

For the relevant environmental acoustic parameters, transmission loss (TL) estimates are computed, sampling the water column over the appropriate depth and range intervals. TL data are sampled at the typical depth(s) of the source and at the nominal center frequency of the source. If the source is relatively broadband, an average over several frequency samples is required.

The accumulated energy within the waters that the source is "operating" is sampled over a volumetric grid. At each grid point, the received energy from each source emission is modeled as the effective energy source level reduced by the appropriate propagation loss from the location of the source at the time of the emission to that grid point and summed. For the peak pressure or positive impulse, the appropriate metric is similarly modeled for each emission. The maximum value of that metric, over all emissions, is stored at each grid point.

The impact volume for a given threshold is estimated by summing the incremental volumes represented by each grid point for which the appropriate metric exceeds that threshold.

Finally, the number of exposures is estimated as the "product" (scalar or vector, depending on whether an animal density depth profile is available) of the impact volume and the animal densities.

This section describes in detail the process of computing impact volumes (that is, the first four steps described above). This discussion is presented in two parts: active sonars and explosive sources. The relevant assumptions associated with this approach and the limitations that are implied are also presented. The final step, computing the number of exposures, is discussed in subsection D.6.

#### **D.4.1 Computing Impact Volumes for Active Sonars**

This section provides a detailed description of the approach taken to compute impact volumes for active sonars. Included in this discussion are:

- Identification of the underwater propagation model used to compute transmission loss data, a listing of the source-related inputs to that model, and a description of the output parameters that are passed to the energy accumulation algorithm.
- Definitions of the parameters describing each sonar type.
- Description of the algorithms and sampling rates associated with the energy accumulation algorithm.

#### **D.4.1.1 Transmission Loss Calculations**

TL data are pre-computed for each of two seasons in each of the environmental provinces described in the previous subsection using the GRAB propagation loss model (Keenan, 2000). The TL output consists of a parametric description of each significant eigenray (or propagation path) from source to animal. The description of each eigenray includes the departure angle from the source (used to model the source vertical directivity later in this process), the propagation time from the source to the animal (used to make corrections to absorption loss for minor differences in frequency and to incorporate a surface-image interference correction at low frequencies), and the TL suffered along the eigenray path.

The eigenray data for a single GRAB model run are sampled at uniform increments in range out to a maximum range for a specific "animal" (or "target" in GRAB terminology) depth. Multiple GRAB runs are made to sample the animal depth dependence. The depth and range sampling parameters are summarized in Table D-10. Note that some of the low-power sources do not require TL data to large maximum ranges.

Sonar	Range Step	Maximum Range	Depth Sampling
MK-48	10 m	10 km	0 – 1 km in 5-m steps 1 km – Bottom in 10-m steps
AN/SQS-53C	10 m	200 km	0 – 1 km in 5-m steps 1 km – Bottom in 10-m steps
AN/ASQ-62	5 m	5 km	0 – 1 km in 5-m steps 1 km – Bottom in 10-m steps
AN/SQS-56	10 m	50 km	0 – 1 km in 5-m steps 1 km – Bottom in 10-m steps

Table D-10. TL Depth and Range Sampling Parameters by Sonar Type

In a few cases, most notably the AN/SQS-53C for thresholds below approximately 180 dB, TL data may be required by the energy summation algorithm at ranges greater than covered by the pre-computed GRAB data. In these cases, TL is extrapolated to the required range using a simple cylindrical spreading loss law in addition to the appropriate absorption loss. This extrapolation leads to a conservative (or under) estimate of TL at the greater ranges.

Although GRAB provides the option of including the effect of source directivity in its eigenray output, this capability is not exercised. By preserving data at the eigenray level, this allows source directivity to be applied later in the process and results in fewer TL calculations.

The other important feature that storing eigenray data supports is the ability to model the effects of surface-image interference that persist over range. However, this is primarily important at frequencies lower than those associated with the sonars considered in this subsection. A detailed description of the modeling of surface-image interference is presented in the subsection on explosive sources.

#### D.4.1.2 Energy Summation

The summation of EFD over multiple pings in a range-independent environment is a trivial exercise for the most part. A volumetric grid that covers the waters in and around the area of sonar operation is initialized. The source then begins its set of pings. For the first ping, the TL from the source to each grid point is determined (summing the appropriate eigenrays after they have been modified by the vertical beam pattern), the "effective" energy source level is reduced by that TL, and the result is added to the accumulated EFD at that grid point. After each grid point has been updated, the accumulated energy at

grid points in each depth layer is compared to the specified threshold. If the accumulated energy exceeds that threshold, then the incremental volume represented by that grid point is added to the impact volume for that depth layer. Once all grid points have been processed, the resulting sum of the incremental volumes represents the impact volume for one ping.

The source is then moved along one of the axes in the horizontal plane by the specified ping separation range and the second ping is processed in a similar fashion. Again, once all grid points have been processed, the resulting sum of the incremental volumes represents the impact volume for two pings. This procedure continues until the maximum number of pings specified has been reached.

Defining the volumetric grid over which energy is accumulated is the trickiest aspect of this procedure. The volume must be large enough to contain all volumetric cells for which the accumulated energy is likely to exceed the threshold but not so large as to make the energy accumulation computationally unmanageable.

Determining the size of the volumetric grid begins with an iterative process to determine the lateral extent to be considered. Unless otherwise noted, throughout this process the source is treated as omnidirectional and the only animal depth that is considered is the TL target depth that is closest to the source depth (placing source and receiver at the same depth is generally an optimal TL geometry).

The first step is to determine the impact range (Rmax) for a single ping. The impact range in this case is the maximum range at which the effective energy source level reduced by the TL is greater than the threshold. Next, the source is moved along a straight-line track and EFD is accumulated at a point that has a closest point of approach (CPA) range of RMAX at the mid-point of the source track. That total EFD summed over all pings is then compared to the prescribed threshold. If it is greater than the threshold (which, for the first  $R_{max}$ , it must be) then  $R_{max}$  is increased by 10 percent, the accumulation process is repeated, and the total energy is again compared to the threshold. This continues until  $R_{max}$  grows large enough to ensure that the accumulated EFD at that lateral range is less than the threshold. The lateral range dimension of the volumetric grid is then set at twice  $R_{max}$ , with the grid centered along the source track. In the direction of advance for the source, the volumetric grid extends on the interval from  $[-R_{max}, 3]$  with the first source position located at zero in this dimension. Note that the source motion in this direction is limited to the interval [0, 2]  $R_{max}$ . Once the source reaches [0, 2]  $R_{max}$  in this direction, the incremental volume contributions have approximately reached their asymptotic limit and further pings add essentially the same amount. This geometry is demonstrated in Figure D-4.

If the source is directive in the horizontal plane, then the lateral dimension of the grid may be reduced and the position of the source track adjusted accordingly. For example, if the main lobe of the horizontal source beam is limited to the starboard side of the source platform, then the port side of the track is reduced substantially as demonstrated in Figure D-5.

Once the extent of the grid is established, the grid sampling can be defined. In both dimensions of the horizontal plane the sampling rate is approximately  $R_{\text{max}}/100$ . The round-off error associated with this sampling rate is roughly equivalent to the error in a numerical integration to determine the area of a circle with a radius of  $R_{\text{max}}$  with a partitioning rate of  $R_{\text{max}}/100$  (approximately 1 percent). The depth-sampling rate of the grid is comparable to the sampling rates in the horizontal plane but discretized to match an actual TL sampling depth. The depth-sampling rate is also limited to no more than 10 meters to ensure that significant TL variability over depth is captured.

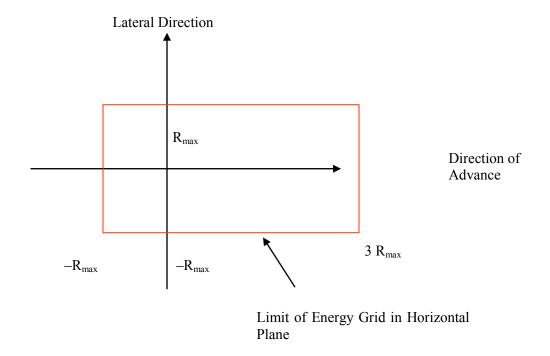


Figure D-4. Horizontal Plane of Volumetric Grid for Omni Directional Source

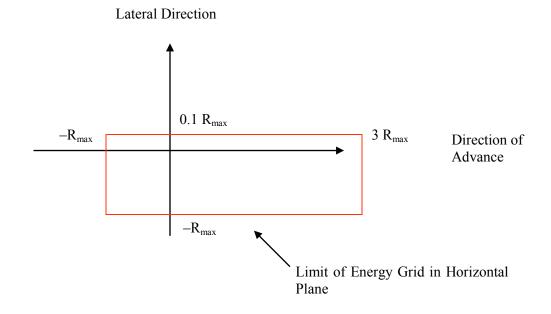


Figure D-5. Horizontal Plane of Volumetric Grid for Starboard Beam Source

## D.4.1.3 Impact Volume per Hour of Sonar Operation

The impact volume for a sonar moving relative to the animal population increases with each additional ping. The rate at which the impact volume increases varies with a number of parameters but eventually approaches some asymptotic limit. Beyond that point the increase in impact volume becomes essentially linear as depicted in Figure D-6.

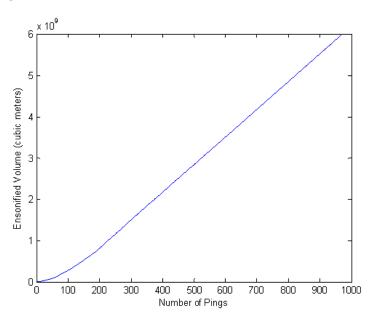


Figure D-6. 53C Impact Volume by Ping

The slope of the asymptotic limit of the impact volume at a given depth is the impact volume added per ping. This number multiplied by the number of pings in an hour gives the hourly impact volume for the given depth increment. Completing this calculation for all depths in a province, for a given source, gives the hourly impact volume vector,  $\boldsymbol{v}_r$ , which contains the hourly impact volumes by depth for province n. Figure D-7 provides an example of an hourly impact volume vector for a particular environment.

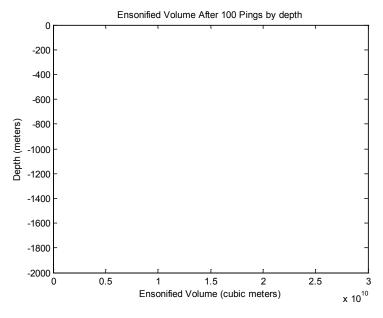


Figure D-7. Example of an Impact Volume Vector

#### **D.4.2 Computing Impact Volumes for Explosive Sources**

This section provides the details of the modeling of the explosive sources. This energy summation algorithm is similar to that used for sonars, only differing in details such as the sampling rates and source parameters. These differences are summarized in the following subsections. A more significant difference is that the explosive sources require the modeling of additional pressure metrics: (1) peak pressure, and (2) "modified" positive impulse. The modeling of each of these metrics is described in detail in the subsections of D.4.2.3.

#### **D.4.2.1 Transmission Loss Calculations**

Modeling impact volumes for explosive sources span requires the same type of TL data as needed for active sonars. However, unlike active sonars, explosive ordnances and the EER source are broadband, contributing significant energy from tens of hertz to tens of kilohertz. To accommodate the broadband nature of these sources, TL data are sampled at seven frequencies from 10 Hz to 40 kHz, spaced every two octaves.

An important propagation consideration at low frequencies is the effect of surface-image interference. As either source or target approach the surface, pairs of paths that differ by a single surface reflection set up an interference pattern that ultimately causes the two paths to cancel each other when the source or target is at the surface. A fully coherent summation of the eigenrays produces such a result but also introduces extreme fluctuations that would have to be highly sampled in range and depth, and then smoothed to give meaningful results. An alternative approach is to implement what is sometimes called a semi-coherent summation. A semi-coherent sum attempts to capture significant effects of surface-image interference (namely the reduction of the field due to destructive interference of reflected paths as the source or target approach the surface) without having to deal with the more rapid fluctuations associated with a fully coherent sum. The semi-coherent sum is formed by a random phase addition of paths that have already been multiplied by the expression:

$$\sin^2\left[4\pi f z_s z_a/(c^2 t)\right]$$

where f is the frequency,  $z_s$  is the source depth,  $z_a$  is the animal depth, c is the sound speed and t is the travel time from source to animal along the propagation path. For small arguments of the sine function this expression varies directly as the frequency and the two depths. It is this relationship that causes the propagation field to go to zero as the depths approach the surface or the frequency approaches zero.

This surface-image interference must be applied across the entire bandwidth of the explosive source. The TL field is sampled at several representative frequencies. However, the image-interference correction given above varies substantially over that frequency spacing. To avoid possible under sampling, the image-interference correction is averaged over each frequency interval.

#### **D.4.2.2 Source Parameters**

Unlike active sonars, explosive sources are defined by only two parameters: (1) net explosive weight, and (2) source detonation depth. Values for these source parameters are defined earlier in subsection D.2.2.

The effective energy source level, which is treated as a de facto input for the other sonars, is instead modeled directly for EER and munitions. For both, the energy source level is comparable to the model used for other explosives (Arons [1954], Weston [1960], McGrath [1971], Urick [1983], Christian and Gaspin [1974]). The energy source level over a one-third octave band with a center frequency of f for a source with a net explosive weight of w pounds is given by:

ESL = 10 
$$\log_{10} (0.26 \ f)$$
 + 10  $\log_{10} (2 \ p_{max}^2 / [1/\theta^2 + 4 \ \pi \ f^2])$  + 197 dB

where the peak pressure for the shock wave at 1 meter is defined as

$$p_{max} = 21600 (w^{1/3} / 3.28)^{1.13} \text{ psi}$$
 (E-1)

and the time constant is defined as:

$$\theta = [(0.058) (w^{1/3}) (3.28 / w^{1/3})^{0.22}] / 1,000 \text{ msec}$$
 (E-2)

In contrast to munitions that are modeled as omnidirectional sources, the EER source is a continuous line array that produces a directed source. The EER array consists of two explosive strips that are fired individually from the center of the array. Each strip generates a beam pattern with the steer direction of the main lobe determined by the burn rate. The resulting response of the entire array is a bifurcated beam for frequencies above 200 Hz, while at lower frequencies the two beams tend to merge into one.

Since very short ranges are under consideration, the loss of directivity of the array needs to be accounted for in the near field of the array. This is accomplished by modeling the sound pressure level across the field as the coherent sum of contributions of infinitesimal sources along the array that are delayed according to the burn rate. For example, for frequency f the complex pressure contribution at a depth z and horizontal range x from an infinitesimal source located at a distance z' above the center of the array is

$$p(r,z) = e^{i\phi}$$

where

$$\phi = kr' + \alpha z'$$
, and

$$\alpha = 2 \pi f / c_b$$

with k the acoustic wave number,  $c_b$  the burn rate of the explosive ribbon, and r' the slant range from the infinitesimal source to the field point (x,z).

Beam patterns as function of vertical angle are then sampled at various ranges out to a maximum range that is approximately  $L^2/\lambda$  where L is the array length and  $\lambda$  is the wavelength. This maximum range is a rule-of-thumb estimate for the end of the near field (Bartberger, 1965). Finally, commensurate with the resolution of the TL samples, these beam patterns are averaged over octave bands.

A couple of sample beam patterns are provided in Figure D-8 and Figure D-9. In both cases, the beam response is sampled at various ranges from the source array to demonstrate the variability across the near field. The 80-Hz family of beam patterns presented in Figure D-8 shows the rise of a single main lobe as range increases.

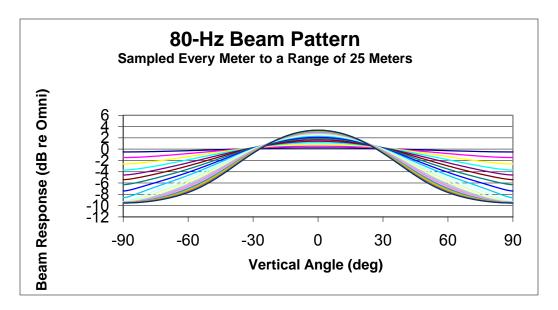


Figure D-8. 80-Hz Beam Patterns across Near Field of EER Source

On the other hand, the 1,250-Hz family of beam patterns depicted in Figure D-9 demonstrates the typical high-frequency bifurcated beam.

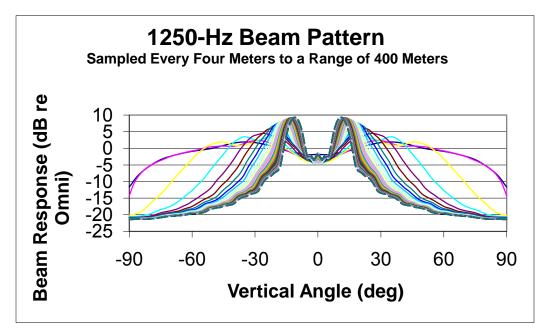


Figure D-9. 1250-Hz Beam Patterns across Near Field of EER Source

# **D.4.2.3** Impact Volumes for Various Metrics

The impact of explosive sources on marine wildlife is measured by three different metrics, each with its own thresholds. The energy metric, peak one-third octave, is treated in similar fashion as the energy metric used for the active sonars, including the summation of energy if there are multiple source emissions. The other two, peak pressure and positive impulse, are not accumulated but rather the maximum levels are taken.

#### Peak One-Third Octave Energy Metric

The computation of impact volumes for the energy metric closely follows the approach taken to model the energy metric for the active sonars. The only significant difference is that EFD is sampled at several frequencies in one-third-octave bands and only the peak one-third-octave level is accumulated over time.

#### Peak Pressure Metric

The peak pressure metric is a simple, straightforward calculation at each range/animal depth combination. First, the transmission ratio, modified by the source level in a one-octave band and the vertical beam pattern, is averaged across frequency on an eigenray-by-eigenray basis. This averaged transmission ratio (normalized by the total broadband source level) is then compared across all eigenrays with the maximum designated as the peak arrival. Peak pressure at that range/animal depth combination is then simply the product of:

- The square root of the averaged transmission ratio of the peak arrival,
- The peak pressure at a range of 1 meter (given by equation E-1), and
- The similar correction (given by r -0.13, where r is the slant range along the eigenray estimated as to with t the travel time along the dominant eigenray and c the nominal speed of sound).

If the peak pressure for a given grid point is greater than the specified threshold, then the incremental volume for the grid point is added to the impact volume for that depth layer.

#### "Modified" Positive Impulse Metric

The modeling of positive impulse follows the work of Goertner (Goertner, 1982). The Goertner model defines a "partial" impulse as

$$T_{min}$$

$$\int p(t) dt$$
0

where p(t) is the pressure wave from the explosive as a function of time t, defined so that p(t) = 0 for t < 0. This pressure wave is modeled as

$$p(t) = p_{max} e^{-t/\theta}$$

where  $p_{max}$  is the peak pressure at 1 meter (see, equation B-1), and  $\theta$  is the time constant defined as

$$\theta = 0.058 \ w^{1/3} (r/w^{1/3})^{0.22}$$
 seconds

with w the net explosive weight (pounds), and r the slant range between source and animal.

The upper limit of the "partial" impulse integral is

$$T_{min} = \min \{T_{cut}, T_{osc}\}$$

where  $T_{cut}$  is the time to cutoff and  $T_{osc}$  is a function of the animal lung oscillation period. When the upper limit is  $T_{cut}$ , the integral is the definition of positive impulse. When the upper limit is defined by  $T_{osc}$ , the integral is smaller than the positive impulse and thus is just a "partial" impulse. Switching the integral

limit from  $T_{cut}$  to  $T_{osc}$  accounts for the diminished impact of the positive impulse upon the animals lungs that compress with increasing depth and leads to what is sometimes call a "modified" positive impulse metric.

The time to cutoff is modeled as the difference in travel time between the direct path and the surfacereflected path in an isospeed environment. At a range of r, the time to cutoff for a source depth  $z_s$  and an
animal depth  $z_a$  is

$$T_{cut} = 1/c \left\{ \left[ r^2 + (z_a + z_s)^2 \right]^{1/2} - \left[ r^2 + (z_a - z_s)^2 \right]^{1/2} \right\}$$

where c is the speed of sound.

The animal lung oscillation period is a function of animal mass M and depth  $z_a$  and is modeled as

$$T_{osc} = 1.17 M^{1/3} (1 + z_a/33)^{-5/6}$$

where M is the animal mass (in kg) and  $z_a$  is the animal depth (in feet).

The modified positive impulse threshold is unique among the various injury and harassment metrics in that it is a function of depth and the animal weight. So instead of the user specifying the threshold, it is computed as  $K (M/42)^{1/3} (1 + z_a/33)^{1/2}$ . The coefficient K depends upon the level of exposure. For the onset of slight lung injury, K is 19.7; for the onset of extensive lung hemorrhaging (1% mortality), K is 47.

Although the thresholds are a function of depth and animal weight, sometimes they are summarized as their value at the sea surface for a typical dolphin calf (with an average mass of 12.2 kg). For the onset of slight lung injury, the threshold at the surface is approximately 13 psi-msec; for the onset of extensive lung hemorrhaging (1% mortality), the threshold at the surface is approximately 31 psi-msec.

As with peak pressure, the "modified" positive impulse at each grid point is compared to the derived threshold. If the impulse is greater than that threshold, then the incremental volume for the grid point is added to the impact volume for that depth layer.

#### D.4.2.4 Impact Volume per Explosive Detonation

The detonations of explosive sources are generally widely spaced in time and/or space. This implies that the impact volume for multiple firings can be easily derived by scaling the impact volume for a single detonation. Thus the typical impact volume vector for an explosive source is presented on a perdetonation basis.

#### D.4.3 Impact Volume by Region

The NWTRC is described by 16 environmental provinces. The hourly impact volume vector for operations involving any particular source is a linear combination of the 16 impact volume vectors with the weighting determined by the distribution of those 16 environmental provinces within the range. Unique hourly impact volume vectors for winter and summer are calculated for each type of source and each metric/threshold combination.

#### D.5 RISK FUNCTION: THEORETICAL AND PRACTICAL IMPLEMENTATION

This section discusses the recent addition of a risk function "threshold" to acoustic effects analysis procedure. This approach includes two parts, a metric, and a function to map exposure level under the metric to probability of harassment. What these two parts mean, how they affect exposure calculations, and how they are implemented are the objects of discussion.

# **D.5.1 Thresholds and Metrics**

The term "thresholds" is broadly used to refer to both thresholds and metrics. The difference, and the distinct roles of each in effects analyses, will be the foundation for understanding the risk function approach, putting it in perspective, and showing that, conceptually, it is similar to past approaches.

Sound is a pressure wave, so at a certain point in space, sound is simply rapidly changing pressure. Pressure at a point is a function of time. Define p(t) as pressure (in micro Pascals) at a given point at time t (in seconds); this function is called a "time series." Figure D-10 gives the time series of the first "hallelujah" in Handel's Hallelujah Chorus.

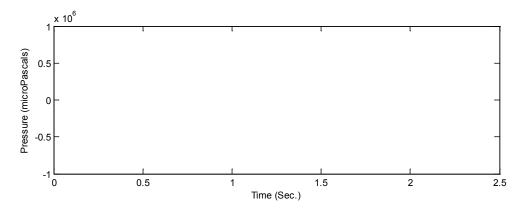


Figure D-10. Time Series

The time-series of a source can be different at different places. Therefore, sound, or pressure, is not only a function of time, but also of location. Let the function p(t), then be expanded to p(t;x,y,z) and denote the time series at point (x,y,z) in space. Thus, the series in Figure D-10 p(t) is for a given point (x,y,z). At a different point in space, it would be different.

Assume that the location of the source is (0,0,0) and this series is recorded at (0,10,-4). The time series above would be p(t;0,10,-4) for 0 < t < 2.5.

As in Figure D-10, pressure can be positive or negative, but acoustic power, which is proportional to the square of the pressure, is always positive, this makes integration meaningful. Figure D-11 is  $p^2(t;0,10,-4)$ .

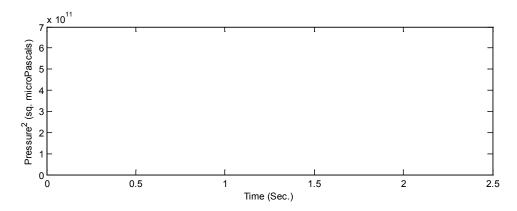


Figure D-11. Time Series Squared

The metric chosen to evaluate the sound field at the end of this first "hallelujah" determines how the time series is summarized from thousands of points, as in Figure D-10, to a single value for each point (x,y,z) in the space. The metric essentially "boils down" the four dimensional p(t,x,y,z) into a three dimensional function m(x,y,z) by dealing with time. There is more than one way to summarize the time component, so there is more than one metric.

#### D.5.2 Maximum Sound Pressure Level

Because of the large dynamic range of the acoustic power, it is generally represented on a logarithmic scale using sound pressure levels (SPLs). SPL is actually the ratio of acoustic power and density (power/unit area =  $\frac{p^2}{Z}$  where  $Z = \rho c$  is the acoustic impedance). This ratio is presented on a logarithmic scale relative to a reference pressure level, and is defined as:

$$SPL = 10\log_{10}\left(\frac{p^2}{p_{ref}^2}\right) = 20\log_{10}\left(abs\left(\frac{p}{p_{ref}}\right)\right)$$

(Note that SPL is defined in dB re a reference pressure, even though it comes from a ratio of powers.)

One way to characterize the power of the time series p(t; x, y, z) with a single number over the 2.5 seconds is to only report the maximum SPL value of the function over time or,

$$SPL_{max} = max \{10 \log_{10}(p^2(t, x, y, z))\}$$
 (relative to a reference pressure of 1 µPa) for  $0 \le t \le 2.5$ 

The  $SPL_{max}$  for this snippet of the Hallelujah Chorus is  $_{10\log_{10}(6.4\times10^{11}\,\mu Pa^2/1\mu Pa^2)=118\,dB}$  re 1  $_{\mu}Pa$  and occurs at 0.2606 seconds, as shown in **Figure** D-12.

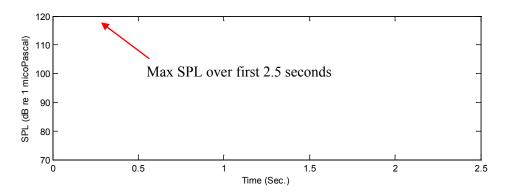


Figure D-12. Max SPL of Time Series Squared

#### **D.5.3** Integration

 $SPL_{max}$  is not necessarily influenced by the duration of the sound (2.5 seconds in this case). Integrating the function over time gives the EFD, which accounts for this duration. A simple integration of  $p^2(t;x,y,z)$  over t is common and is proportional to the EFD at (x,y,z). Because we will again be dealing in levels (logarithms of ratios), we neglect the impedance and simply measure the square of the pressure:

$$Energy = \int_{0}^{T} p^{2}(t, x, y, z)dt$$
, where *T* is the maximum time of interest in this case 2.5.

The energy for this snippet of the Hallelujah Chorus is  $8.47 \times 10^{10} \, \mu Pa^2 \cdot s$  . This would more commonly be reported as an energy level (EL):

$$EL = 10\log_{10} \left( \frac{\int_{0}^{T} p^{2}(t, x, y, z) dt}{1.0 \mu P a^{2} s} \right) = 109.3 \text{ dB re } 1\mu P a^{2} s$$

Energy is sometimes called "equal energy" because if p(t) is a constant function and the duration is doubled, the effect is the same as doubling the signal amplitude (y value). Thus, the duration and the signal have an "equal" influence on the energy metric.

Mathematically,

$$\int_{0}^{2T} p(t)^{2} dt = 2 \int_{0}^{T} p(t)^{2} dt = \int_{0}^{T} 2p(t)^{2} dt$$

or a doubling in duration equals a doubling in energy equals a doubling in signal.

Sometimes, the integration metrics are referred to as having a "3 dB exchange rate" because if the duration is doubled, this integral increases by a factor of two, or  $10\log_{10}(2)=3.01$  dB. Thus, equal energy has "a 3 dB exchange rate."

After p(t) is determined (i.e., when the stimulus is over), propagation models can be used to determine p(t;x,y,z) for every point in the vicinity and for a given metric. Define

$$m_a(x, y, z, T) =$$
 value of metric "a" at point  $(x, y, z)$  after time  $T$ 

So,

$$m_{energy}(x, y, z; T) = \int_{0}^{T} p(t)^{2} dt$$

$$m_{\max SPL}(x, y, z; T) = \max 10 \log_{10}(p^2(t)) over[0, T]$$

Since modeling is concerned with the effects of an entire event, T is usually implicitly defined: a number that captures the duration of the event. This means that  $m_a(x, y, z)$  is assumed to be measured over the duration of the received signal.

# D.5.3.1 Three Dimensions versus Two Dimensions

To further reduce the calculation burden, it is possible to reduce the domain of  $m_a(x, y, z)$  to two dimensions by defining  $m_a(x, y) = \max\{m_a(x, y, z)\}$  over all z. This reduction is not used for this analysis, which is exclusively three-dimensional.

#### D.5.4 Threshold

For a given metric, a threshold is a function that gives the probability of exposure at every value of  $m_{a}$ . This threshold function will be defined as

$$D(m_a(x, y, z)) = P(effect \ at \ m_a(x, y, z))$$

The domain of D is the range of  $m_a(x, y, z)$ , and its range is the proportion of thresholds.

An example of threshold functions is the heavyside (or unit step) function, currently used to determine PTS and TTS in cetaceans. For PTS, the metric is  $m_{energy}(x, y, z)$ , defined above, and the threshold function is a heavyside function with a discontinuity at 215 dB, shown in Figure D13.

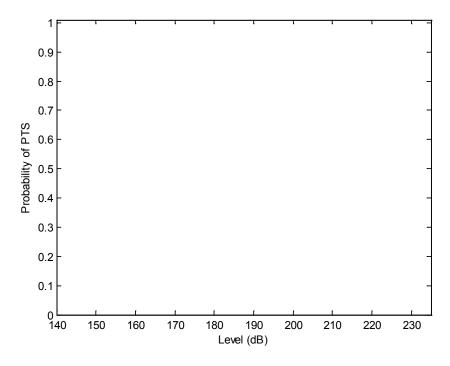


Figure D-13. PTS Heavyside Threshold Function

Mathematically, this D is defined as:

$$D(m_{energy}) = \begin{cases} 0 \text{ for } m_{energy} < 215\\ 1 \text{ for } m_{energy} \ge 215 \end{cases}$$

Any function can be used for D, as long as its range is in [0,1]. The risk function uses normal Feller risk functions (defined below) instead of heavyside functions, and use the max SPL metric instead of the energy metric. While a heavyside function is specified by a single parameter, the discontinuity, a Feller function requires three parameters: the basement cutoff value, the level above the basement for 50% effect, and a steepness parameter. Mathematically, these Feller, "risk" functions, D, are defined as

$$D(m_{\max SPL}) = \begin{cases} \frac{1}{1 + \left(\frac{K}{m_{\max SPL} - B}\right)^A} & \text{for } m_{\max SPL} \ge B\\ 0 & \text{for } m_{\max SPL} < B \end{cases}$$

where B=cutoff (or basement), K=the difference in level (dB) between the basement and the median (50% effect) harassment level, and A = the steepness factor. The dose function for odontocetes and pinnipeds uses the parameters:

$$B = 120 \text{ dB},$$

$$K = 45 \text{ dB}$$
, and

$$A = 10$$
.

The dose function for mysticetes uses:

$$B = 120 \text{ dB},$$

$$K = 45 \text{ dB}$$
, and

$$A = 8$$
.

Harbor porpoises are a special case. Though the metric for their behavioral harassment is also SPL, their risk function is a heavyside step function with a harassment threshold discontinuity (0 % to 100 %) at 120 dB. All other species use the continuous Feller cumulative distribution function (CDF) for evaluating expected harassment.

#### **D.5.5** Multiple Metrics and Thresholds

It is possible to have more than one metric, and more than one threshold in a given metric. For example, in this document, humpback whales have two metrics (energy and max SPL) that define MMPA Level A and Level B harassment. The most conservative of these is used to determine harassment. The energy thresholds are heavyside functions, as described above, with discontinuities at 215 and 195 for PTS and TTS respectively. The max SPL effect is calculated from the Feller risk function for odontocetes defined in the previous section.

# **D.5.6 Calculation of Expected Exposures**

Determining the number of expected exposures for disturbance is the object of this analysis.

Expected exposures in volume 
$$V = \int_{V} \rho(V)D(m_a(V))dV$$

For this analysis,  $m_a = m_{\text{max } SPL}$ , so

$$\int_{V} \rho(V) D(m_a(V)) dV = \int_{-\infty-\infty}^{\infty} \int_{-\infty}^{\infty} \rho(x, y, z) D(m_{\text{max SPL}}(x, y, z)) dx dy dz$$

In this analysis, the densities are constant over the xy-plane, and the z dimension is always negative, so this reduces to

$$\int_{-\infty}^{0} \rho(z) \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} D(m_{\text{max SPL}}(x, y, z)) dx dy dz$$

# **D.5.7 Numeric Implementation**

Numeric integration of  $\int_{-\infty}^{0} \rho(z) \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} D(m_{\text{max }SPL}(x, y, z)) dx dy dz$  can be involved because, although the

bounds are infinite, D is non-negative out to 141 dB, which, depending on the environmental specifics, can drive propagation loss calculations and their numerical integration out to more than 100 km.

The first step in the solution is to separate out the xy-plane portion of the integral:

Define 
$$f(z) = \int_{-\infty-\infty}^{\infty} \int_{-\infty}^{\infty} D(m_{\text{max SPL}}(x, y, z)) dx dy$$
.

Calculation of this integral is the most involved and time consuming part of the calculation. Once it is complete,

$$\int_{-\infty}^{0} \rho(z) \int_{-\infty-\infty}^{\infty} \int_{-\infty}^{\infty} D(m_{\text{max SPL}}(x, y, z)) dx dy dz = \int_{-\infty}^{0} \rho(z) f(z) dz ,$$

which, when numerically integrated, is a simple dot product of two vectors.

Thus, the calculation of f(z) requires the majority of the computation resources for the numerical integration. The rest of this section presents a brief outline of the steps to calculate f(z) and preserve the results efficiently.

The concept of numerical integration is, instead of integrating over continuous functions, to sample the functions at small intervals and sum the samples to approximate the integral. Smaller sized intervals yield closer approximations with longer calculation time, so a balance between accuracy and time is determined in the decision of step size. For this analysis, z is sampled in 5-meter steps to 1,000 meters in depth and 10-meter steps to 2,000 meters, which is the limit of animal depth in this analysis. The step size for x is 5 meters, and y is sampled with an interval that increases as the distance from the source increases. Mathematically,

$$z \in Z = \{0,5,...1000,1010,...,2000\}$$

$$x \in X = \{0,\pm 5,...,\pm 5k\}$$

$$y \in Y = \left\{0,\pm 5 * (1.005)^{0},\pm 5 * \left[(1.005)^{0} + (1.005)^{1}\right]...,\pm 5 * \left[\sum_{i=0}^{j} (1.005)^{i}\right]\right\}$$

for integers k, j, which depend on the propagation distance for the source. For this analysis, k = 20,000 and j = 600.

With these steps,  $f(z_0) = \int_{-\infty-\infty}^{\infty} D(m_{\text{max SPL}}(x, y, z_0)) dx dy$  is approximated as

$$\sum_{z \in Y} \sum_{x \in X} D(m_{\max SPL}(x, y, z_0)) \Delta x \Delta y$$

where X,Y are defined as above.

This calculation must be repeated for each  $z_0 \in Z$ , to build the discrete function f(z).

With the calculation of f(z) complete, the integral of its product with  $\rho(z)$  must be calculated to complete evaluation of

$$\int_{-\infty}^{\infty} \rho(z) \int_{-\infty-\infty}^{\infty} \int_{-\infty}^{\infty} D(m_{\max SPL}(x, y, z)) dx dy dz = \int_{-\infty}^{0} \rho(z) f(z) dz$$

Since f(z) is discrete, and  $\rho(z)$  can be readily made discrete,  $\int_{-\infty}^{0} \rho(z) f(z) dz$  is approximated numerically as  $\sum_{z \in Z} \rho(z) f(z)$ , a dot product.

#### D.5.8 Preserving Calculations for Future Use

Calculating f(z) is the most time-consuming part of the numerical integration, but the most time-consuming portion of the entire process is calculating  $m_{\max SPL}(x, y, z)$  over the area range required for the cutoff value (120 dB). The calculations usually require propagation estimates out to over 100 km, and those estimates, with the beam pattern, are used to construct a sound field that extends 200 km x 200 km—40,000 sq km, with a calculation at the steps for every value of X and Y, defined above. This is repeated for each depth, to a maximum of 2,000 meters.

Saving the entire  $m_{\max SPL}$  for each z is unrealistic, requiring great amounts of time and disk space. Instead, the different levels in the range of  $m_{\max SPL}$  are sorted into 0.5 dB wide bins; the volume of water at each bin level is taken from  $m_{\max SPL}$ , and associated with its bin. Saving this, the amount of water ensonified at each level, at a 0.5 dB resolution, preserves the ensonification information without using the space and time required to save  $m_{\max SPL}$  itself. Practically, this is a histogram of occurrence of level at

each depth, with 0.5 dB bins. Mathematically, this is simply defining the discrete functions  $V_z(L)$ , where  $L = \{.5a\}$  for every positive integer a, and for all  $z \in Z$ . These functions, or histograms, are saved for future work. The information lost by saving only the histograms is *where* in space the different levels occur, although *how often* they occur is saved. But the thresholds (dose response curves) are purely a function of level, not location, so this information is sufficient to calculate f(z).

Applying the dose function to the histograms is a dot product:

$$\sum_{\ell \in L_1} D(\ell) V_{z_0}(\ell) \approx \int_{-\infty - \infty}^{\infty} D(m_{\max SPL}(x, y, z_0)) dx dy$$

So, once the histograms are saved, neither  $m_{\max SPL}(x,y,z)$  nor f(z) must be recalculated to generate  $\int\limits_{0}^{\infty} \rho(z) \int\limits_{0}^{\infty} \int\limits_{0}^{\infty} D(m_{\max SPL}(x,y,z)) dx dy dz$  for a new threshold function.

For the interested reader, the following section includes an in-depth discussion of the method, software, and other details of the f(z) calculation.

#### D.5.9 Software Detail

The risk function metric uses the cumulative normal probability distribution to determine the probability that a population of animals is affected by a given SPL. The probability distribution is defined by a low cutoff level (below which the species is not affected), a 50 percent effect level, and a steepness factor. The acoustic quantity of interest is the maximum SPL experienced over multiple pings in a range-independent environment. The procedure for calculating the impact volume at a given depth is relatively simple. In brief, given the SPL of the source and the transmission loss (TL) curve, the received SPL is calculated on a volumetric grid. For a given depth, volume associated with each SPL interval is calculated. Then, this volume is multiplied by the probability that a population of animals will be affected by that SPL. This gives the impact volume for that depth, which can be multiplied by the animal densities at that depth, to obtain the number of animals affected at that depth. The process repeats for each depth to construct the impact volume as a function of depth. It is important to note that the probabilities associated with acoustic modeling do not represent an individual's probability of responding; they identify the proportion of an exposed population (as represented by an evenly distributed density of marine mammals per unit area) that is likely to respond to an exposure.

The case of a single emission of sonar energy, one ping, illustrates the computational process in more detail. First, the SPLs are segregated into a sequence of bins that cover the range encountered in the area. The SPL are used to define a volumetric grid of the local sound field. The impact volume for each depth is calculated as follows: for each depth in the volumetric grid, the SPL at each *xy*-plane grid point is calculated using the SPL of the source, the TL curve, the horizontal beam pattern of the source, and the vertical beam patterns of the source. The SPLs in this grid become the bins in the volume histogram. Figure D-14 shows a volume histogram for a low-power sonar. Level bins are 0.5 dB in width and the depth is 50 meters in an environment with water depth of 100 meters. The oscillatory structure at very low levels is due the flattening of the TL curve at long distances from the source, which magnifies the fluctuations of the TL as a function of range. The "expected" impact volume for a given level at a given depth is calculated by multiplying the volume in each level bin by the dose response probability function at that level. Total expected impact volume for a given depth is the sum of these "expected" volumes. Figure D-5 is an example of the impact volume as a function of depth at a water depth of 100 meters.

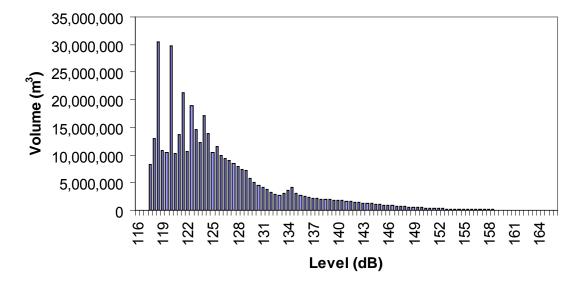


Figure D-14. Example of a Volume Histogram

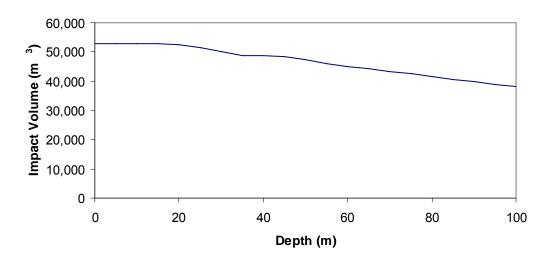


Figure D-15. Example of the Dependence of Impact Volume on Depth

The volumetric grid covers the waters in and around the area of sonar operation. The grid for this analysis has a uniform spacing of 5 meters in the x-coordinate and a slowly expanding spacing in the y-coordinate that starts with 5 meters spacing at the origin. The growth of the grid size along the y-axis is a geometric series where each successive grid size is obtained from the previous by multiplying it by 1 + Ry, where Ry is the y-axis growth factor. The  $n^{th}$  grid size is related to the first grid size by multiplying by  $(1 + Ry)^{(n-1)}$ . For an initial grid size of 5 meters and a growth factor of 0.005, the  $100^{th}$  grid increment is 8.19 meters. The constant spacing in the x-coordinate allows greater accuracy as the source moves along the x-axis. The slowly increasing spacing in y reduces computation time, while maintaining accuracy, by taking advantage of the fact that TL changes more slowly at longer distances from the source. The x-and y-coordinates extend from  $-R_{max}$  to  $+R_{max}$ , where  $R_{max}$  is the maximum range used in the TL calculations. The z direction uses a uniform spacing of 5 meters down to 1,000 meters and 10 meters from 1,000 to 2,000 meters. This is the same depth mesh used for the effective energy metric as described above. The depth mesh does not extend below 2,000 meters, on the assumption that animals of interest are not found below this depth.

The next three figures indicate how the accuracy of the calculation of impact volume depends on the parameters used to generate the mesh in the horizontal plane. Figure D-16 shows the relative change of impact volume for one ping as a function of the grid size used for the *x*-axis. The *y*-axis grid size is fixed at 5 meters and the *y*-axis growth factor is 0, i.e., uniform spacing. The impact volume for a 5-meter grid size is the reference. For grid sizes between 2.5 and 7.5 meters, the change is less than 0.1%. A grid size of 5 meters for the *x*-axis is used in the calculations. Figure D-17 shows the relative change of impact volume for one ping as a function of the grid size used for the *y*-axis. The *x*-axis grid size is fixed at 5 meters and the *y*-axis growth factor is 0. The impact volume for a 5 meters grid size is the reference. This figure is very similar to that for the *x*-axis grid size. For grid sizes between 2.5 and 7.5 meters, the change is less than 0.1%. A grid size of 5 meters is used for the y-axis in our calculations. Figure D-18 shows the relative change of impact volume for one ping as a function of the y-axis growth factor. The *x*-axis grid size is fixed at 5 meters and the initial *y*-axis grid size is 5 meters. The impact volume for a growth factor of 0 is the reference. For growth factors from 0 to 0.01, the change is less than 0.1%. A growth factor of 0.005 is used in the calculations.

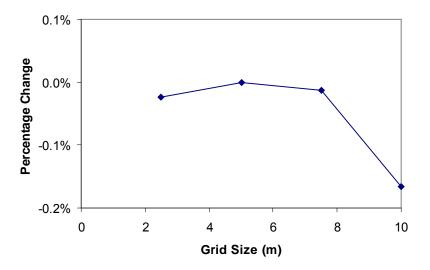


Figure D-16. Change of Impact Volume as a Function of x-axis Grid Size

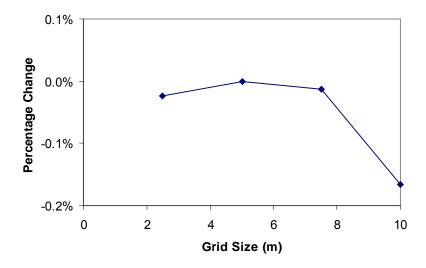


Figure D-17. Change of Impact Volume as a Function of y-axis Grid Size

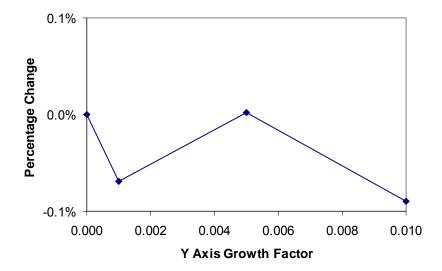


Figure D-18. Change of Impact Volume as a Function of y-axis Growth Factor

Another factor influencing the accuracy of the calculation of impact volumes is the size of the bins used for SPL. The SPL bins extend from 100 dB (far lower than required) up to 300 dB (much higher than that expected for any sonar system). Figure D-19 shows the relative change of impact volume for one ping as a function of the bin width. The *x*-axis grid size is fixed at 5 meters the initial *y*-axis grid size is 5 meters, and the *y*-axis growth factor is 0.005. The impact volume for a bin size of 0.5 dB is the reference. For bin widths from 0.25 dB to 1.00 dB, the change is about 0.1%. A bin width of 0.5 is used in our calculations.

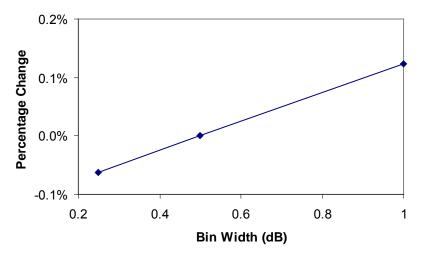


Figure D-19. Change of Impact Volume as a Function of Bin Width

The process of obtaining the maximum SPL at each grid point in the volumetric grid is straightforward. The active sonar starts at the origin and moves at constant speed along the positive *x*-axis emitting a burst of energy, a ping, at regularly spaced intervals. For each ping, the distance and horizontal angle connecting the sonar to each grid point is computed. Calculating the TL from the source to a grid point has several steps. The TL is made up of the sum of many eigenrays connecting the source to the grid point. The beam pattern of the source is applied to the eigenrays based on the angle at which they leave the source. After summing the vertically beamformed eigenrays on the range mesh used for the TL calculation, the vertically beamformed TL for the distance from the sonar to the grid point is derived by interpolation. Next, the horizontal beam pattern of the source is applied using the horizontal angle

connecting the sonar to the grid point. To avoid problems in extrapolating TL, only grid points with distances less than  $R_{max}$  are used. To obtain the SPL at a grid point, the SPL of the source is reduced by that TL. For the first ping, the volumetric grid is populated by the calculated SPL at each grid point. For the second ping and subsequent pings, the source location increments along the x-axis by the spacing between pings and the SPL for each grid point is again calculated for the new source location. Since the risk function metric uses the maximum of the SPLs at each grid point, the newly calculated SPL at each grid point is compared to the SPL stored in the grid. If the new level is larger than the stored level, the value at that grid point is replaced by the new SPL.

For each bin, a volume is determined by summing the ensonified volumes with a maximum SPL in the bin's interval. This forms the volume histogram shown in Figure D-14. Multiplying by the risk function probability function for the level at the center of a bin gives the impact volume for that bin. The result can be seen in Figure D-15, which is an example of the impact volume as a function of depth.

The impact volume for a sonar moving relative to the animal population increases with each additional ping. The rate at which the impact volume increases for the dose response metric is essentially linear with the number of pings. Figure D-20 shows the dependence of impact volume on the number of pings. The slope of the line at a given depth is the impact volume added per ping. This number multiplied by the number of pings in an hour gives the hourly impact volume for the given depth increment. Completing this calculation for all depths in a province, for a given source, gives the hourly impact volume vector which contains the hourly impact volumes by depth for a province. Figure D-21 provides an example of an hourly impact volume vector for a particular environment. Given the speed of the sonar platform, the hourly impact volume vector could be displayed as the impact volume vector per kilometer of track.

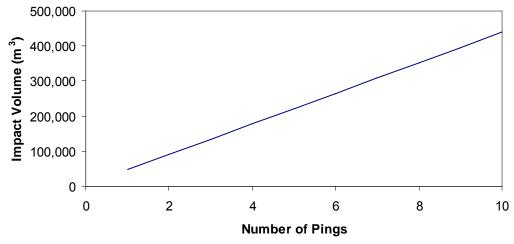


Figure D-20. Dependence of Impact Volume on the Number of Pings

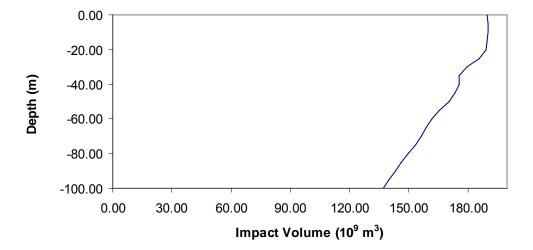


Figure D-21. Example of an Hourly Impact Volume Vector

#### D.6 EXPOSURE ESTIMATES

Densities are usually reported by marine biologists as animals per square kilometer (km²), which is an area metric. This gives an estimate of the number of animals below the surface in a certain area, but does not provide any information about their distribution in depth. The impact volume vector (see subsection D.4.3) specifies the volume of water ensonified above the specified threshold in each depth interval. A corresponding animal density for each of those depth intervals is required to compute the expected value of the number of exposures. The two-dimensional area densities do not contain this information, so three-dimensional densities must be constructed by using animal depth distributions to extrapolate the density at each depth. The required depth distributions are presented in the biology subsection.

The following sperm whale example demonstrates the methodology used to create a three-dimensional density by merging the area densities with the depth distributions. The sperm whale surface density is 0.0117 whales per km<sup>2</sup>. From the depth distribution report, "depth distribution for sperm whales based on information in the Amano paper is: 31% in 0-10 m, 8% in 10-200 m, 9% in 201-400 m, 9% in 401-600 m, 9% in 601-800 m and 34% in >800 m." So the sperm whale density at 0-10 m is 0.0117\*0.31/0.01 = 0.3627 per cubic km, at 10-200 m is 0.0117\*0.08/0.19 = 0.004926 per cubic km, and so forth.

In general, the impact volume vector samples depth in finer detail than given by the depth distribution data. When this is the case, the densities are apportioned uniformly over the appropriate intervals. For example, suppose the impact volume vector provides volumes for the intervals 0-10 meters, 10-50 meters, and 50-200 meters. Then for the depth-distributed densities discussed in the preceding paragraph,

- 0.3627 whales per cubic km is used for 0-10 meters,
- 0.004926 whales per cubic km is used for 10-50 meters, and
- 0.004926 whales per cubic km is used for 50-200 meters.

Once depth-varying, three-dimensional densities are specified for each species type, with the same depth intervals and the ensonified volume vector, the density calculations are finished. The expected number of ensonified animals within each depth interval is the ensonified volume at that interval multiplied by the volume density at that interval and this can be obtained as the dot product of the ensonified volume and animal density vectors.

Since the ensonified volume vector is the ensonified volume per unit operation (i.e., per hour, per sonobuoy, etc.), the final exposure count for each species is the unit operation exposure count multiplied by the number of units (hours, sonobuoys, etc).

#### D.7 POST ACOUSTIC MODELING ANALYSIS

The acoustic modeling results include additional analysis to account for land mass, multiple ships, and number of animals that could be exposed. Specifically, post modeling analysis is designed to consider:

Acoustic footprints for sonar sources must account for land masses.

Acoustic modeling should account for the maximum number of individuals of a species that could potentially be exposed to sonar within the course of 1 day or a discreet continuous sonar event if less than 24 hours.

When modeling the effect of sound projectors in the water, the ideal task presents modelers with complete *a priori* knowledge of the location of the source(s) and transmission patterns during the times of interest. In these cases, calculation inputs include the details of source path, proximity of shoreline, high-resolution density estimates, and other details of the scenario. However, in the NWTRC, there are sound-producing events for which the source locations and transmission patterns are unknown, but still require analysis to predict effects. For these cases, a more general modeling approach is required: "We will be operating somewhere in this large area for X minutes. What are the potential effects on average?"

Modeling these general scenarios requires a statistical approach to incorporate the scenario nuances into harassment calculations. For example, one may ask: "If an animal receives 130 dB SPL when the source passes at CPA on Tuesday morning, how do we know it does not receive a higher level on Tuesday afternoon?" This question cannot be answered without knowing the path of the source (and several other facts). Because the path of the source is unknown, the number of an individual's re-exposures cannot be calculated directly. But it can, on average, be accounted for by making appropriate assumptions.

Table D-11 lists unknowns created by uncertainty about the specifics of a future proposed action, the portion of the calculation to which they are relevant, and the assumption that allows the effect to be computed without the detailed information:

Unknowns	Relevance	Assumption	
Path of source(esp. with respect to animals)	Ambiguity of multiple exposures, Local population: upper bound of harassments	Most conservative case: sources can be anywhere within range	
Source locations	Ambiguity of multiple exposures, land shadow	Equal distribution of action in each range	
Direction of sonar transmission	Land shadow	Equal probability of pointing any direction	

Table D-11. Unknowns and Assumptions

The following sections discuss two topics that require action details, and describe how the modeling calculations used the general knowledge and assumptions to overcome the future-action uncertainty with respect to re-exposure of animals, and land shadow.

# D.7.1 Multiple Exposures in General Modeling Scenario

Consider the following hypothetical scenario. A box is painted on the surface of a well-studied ocean environment with well-known propagation. A sonar-source and 100 whales are inserted into that box and a curtain is drawn. What will happen? The details of what will happen behind the curtain are unknown, but the existing knowledge, and general assumptions, can allow for a calculation of average affects.

For the first period of time, the source is traveling in a straight line and pinging at a given rate. In this time, it is known how many animals, on average, receive their max SPLs from each ping. As long as the source travels in a straight line, this calculation is valid. However, after an undetermined amount of time, the source will change course to a new and unknown heading.

If the source changes direction 180 degrees and travels back through the same swath of water, all the animals the source passes at CPA before the next course change have already been exposed to what will be their maximum SPL, so the population is not "fresh." If the direction does not change, only new animals will receive what will be their maximum SPL from that source (though most have received sound from it), so the population is completely "fresh." Most source headings lead to a population of a mixed "freshness," varying by course direction. Since the route and position of the source over time are unknown, the freshness of the population at CPA with the source is unknown. This ambiguity continues through the remainder of the exercise.

What is known? The source and, in general, the animals remain in the vicinity of the range. Thus, if the farthest range to a possible effect from the source is X km, no animals farther than X km outside of the operating area (OPAREA) can be harassed. The intersection of this area with a given animal's habitat multiplied by the density of that animal in its habitat represents the maximum number of animals that can be harassed by activity in that OPAREA, which shall be defined as "the local population." Two details: first, this maximum should be adjusted down if a risk function is being used, because not 100% of animals within X km of the OPAREA border will be harassed. Second, it should be adjusted up to account for animal motion in and out of the area.

The ambiguity of population freshness throughout the exercise means that multiple exposures cannot be calculated for any individual animal. It must be dealt with generally at the population level.

# D.7.1.1 Solution to Ambiguity of Multiple Exposures in the General Modeling Scenario

At any given time, the population has received a maximum SPL (possibly zero) that indicates the probability of harassment in the exercise. This probability indicates the expected value of the number of harassments. For example, if a population receives a level that indicates 50% probability of harassment, it contributes 0.5 to the sum of the expected number of harassments. If it is passed later with a higher level that indicates a 70% chance of harassment, its contribution increases to 0.7. Let the expected value of harassments at a given time be defined as "the harassed population" and the difference between the local population (as defined above) and the harassed population be defined as "the unharassed population." As the exercise progresses, the harassed population will never decrease and the unharassed population will never increase. It is important to note that the probabilities associated with acoustic modeling do not represent an individual's probability of responding; they identify the proportion of an exposed population (as represented by an evenly distributed density of marine mammals per unit area) that is likely to respond to an exposure.

The unharassed population represents the number of animals statistically "available" for harassment. Since we do not know where the source is, or where these animals are, we assume an average (uniform) distribution of the unharassed population over the area of interest. The densities of unharassed animals are lower than the total population density because some animals in the local population are in the harassed population.

Density relates linearly to expected harassments. If action A in an area with a density of 2 animals per km2 produces 100 expected harassments, then action A in an area with 1 animal per km2 produces 50 expected harassments. The modeling produces the number of expected harassments per ping starting with 100% of the population unharassed. The next ping will produce slightly fewer harassments because the pool of unharassed animals is slightly less.

For example, consider the case where 1 animal is harassed per ping when the local population is 100, 100% of which are initially unharassed. After the first ping, 99 animals are unharassed, so the number of animals harassed during the second ping are

$$1\left(\frac{99}{100}\right) = 1(.99) = 0.99$$
 animals

and so on for the subsequent pings.

A closed form function for this process can be derived as follows.

Define H = number of animals harassed per ping with 100% unharassed population. H is calculated by determining the expected harassments for a source moving in a straight line for the duration of the exercise and dividing by the number of pings in the exercise (Figure D-22).

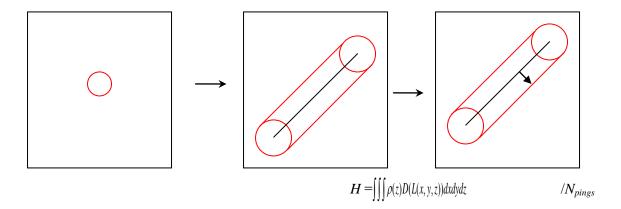


Figure D-22. Process of Calculating H

The total unharassed population is then calculated by iteration. Each ping affects the un-harassed population left after all previous pings:

Define  $P_n$  = unharassed population after ping n

$$P_0$$
 =local population

$$P_1 = P_0 - H$$

$$P_2 = P_1 - H \left(\frac{P_1}{P_0}\right)$$

$$P_n = P_{n-1} - H \left( \frac{P_{n-1}}{P_0} \right)$$

Therefore,

$$P_{n} = P_{n-1} \left( 1 - \left( \frac{H}{P_{0}} \right) \right) = P_{n-2} \left( 1 - \left( \frac{H}{P_{0}} \right) \right)^{2} = \dots = P_{0} \left( 1 - \left( \frac{H}{P_{0}} \right) \right)^{n}$$

Thus, the total number of harassments depends on the per-ping harassment rate in an un-harassed population, the local population size, and the number of operation hours.

# D.7.1.2 Local Population: Upper Bound on Harassments

As discussed above, Navy planners have confined periods of sonar use to training areas. The size of the harassed population of animals for an action depends on animal re-exposure, so uncertainty about the precise source path creates variability in the "harassable" population. Confinement of sonar use to a sonar training area allows modelers to compute an upper bound, or worst case, for the number of harassments with respect to location uncertainty. This is done by assuming that every animal which enters the training area at any time in the exercise (and also many outside) is "harassable" and creates an upper bound on the number of harassments for the exercise. Since this is equivalent to assuming that there are sonars transmitting simultaneously from each point in the confined area throughout the action length, this greatly overestimates the harassments from an exercise.

NMFS has defined a 24-hour "refresh rate," or the accumulated exposures over 24 hours. The Navy has determined that, in a 24-hour period, all sonar activities in the NWTRC transmit for no longer than 2 hours.

The most conservative assumption for a single ping is that it harasses the entire population within the range (a gross over-estimate). However, the total harassable population for multiple pings will be even greater since animal motion over the period in the above table can bring animals into range that otherwise would be out of the harassable population.

#### D.7.1.3 Animal Motion Expansion

Though animals often change course to swim in different directions, straight-line animal motion would bring the more animals into the harassment area than a "random walk" motion model. Since precise and accurate animal motion models exist more as speculation than documented fact and because the modeling requires an undisputable upper bound, calculation of the upper bound for NWTRC modeling areas uses a straight-line animal motion assumption. This is a conservative assumption.

For a circular area, the straight-line motion in any direction produces the same increase in harassable population. However, since the ranges are non-circular polygons, choosing the initial fixed direction as perpendicular to the longest diagonal produces greater results than any other direction. Thus, the product of the longest diagonal and the distance the animals move in the period of interest gives an overestimate

of the expansion in range modeling areas due to animal motion. The NWTRC expansions use this estimate as an absolute upper bound on animal-motion expansion.

Figure D-23 illustrates an example of the overestimation, which occurs during the second arrow:

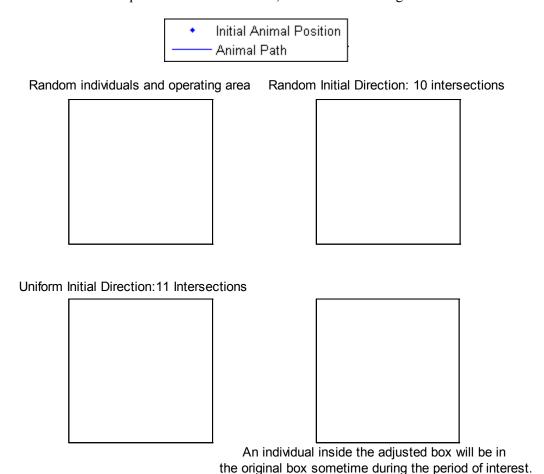


Figure D-23. Process of Setting an Upper Bound on Individuals Present in Area

It is important to recognize that the area used to calculate the harassable population, shown in Figure D-23 will, in general, be much larger than the area that will be within the ZOI of a ship for the duration of its broadcasts. For a ship moving faster than the speed of the marine animals, a better (and much smaller) estimate of the harassable population would be that within the straight line ZOI cylinder shown in Figure D-22. Using this smaller population would lead to a greater dilution of the unharassed population per ping and would greatly reduce the estimated harassments.

# D.7.1.4 Risk Function Expansion

The expanded area contains the number of animals that will enter the range over the period of interest. However, an upper bound on harassments must also include animals outside the area that would be affected by a source transmitting from the area's edge. A gross overestimation could simply assume pinging at every point on the range border throughout the exercise and would include all area with levels from a source on the closest border point greater than the risk function basement. In the case of NWTRC, this would include all area within approximately 150 km from the edge of the adjusted box. This basic method would give a crude and exaggerated upper bound, since only a tiny fraction of this out-of-range area can be ensonified above threshold for a given ping. A more refined upper bound on harassments can be found by maintaining the assumption that a sonar is transmitting from each point in the adjusted box

and calculating the expected ensonified area, which would give all animals inside the area a 100% probability of harassment, and those outside the area a varying probability, based on the risk function.

$$\int_{0}^{L^{-1}(120dB)} D(L(r)) dr,$$

Where L is the SPL function with domain in range and range in level,

r is the range from the sonar operating area,

 $L^{-1}(120 \text{ dB})$  is the range at which the received level drops to 120 dB, and

D is the risk function function (probability of harassment vs. Level).

At the corners of the polygon, additional area can be expressed as

$$\frac{\left[\pi-\theta\right]\int\limits_{0}^{L^{-1}(120dB)}D(L(r))rdr}{2\pi}$$

with D, L, and r as above, and

 $\theta$  the inner angle of the polygon corner, in radians.

For the risk function and transmission loss of the NWTRC, this method adds an area equivalent by expanding the boundaries of the adjusted box by 4 km. The resulting shape, the adjusted box with a boundary expansion of 4 km, does not possess special meaning for the problem. But the number of individuals contained by that shape, is the harassable population and an absolute upper bound on possible harassments for that operation.

The following plots (Figure D-24) illustrate the growth of area for the sample case above. The shapes of the boxes are unimportant. The area after the final expansion, though, gives an upper bound on the "harassable," or initially unharassed population which could be affected by operations.

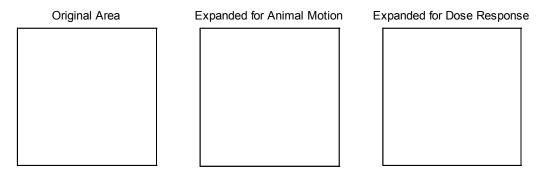


Figure D-24. Process of Expanding Area to Create Upper Bound of Harassments

# D.7.1.5 Example Case

Consider a sample case from the NWTRC General Area. For the most powerful source, the 53C, the expected winter rate of harassment for short-finned pilot whales is approximately 0.00022128 harassments per ping. The exercise will transmit sonar pings for 2 hours in a 24-hour period as consistent with NWTRC planned use, with 120 pings per minute, a total of 120\*2=240 pings in a 24-hour period.

The NWTRC General Area has an area of approximately  $422,265 \text{ km}^2$  and a diagonal of 1,053 km. Adjusting this with straight-line (upper bound) animal motion of 5.5 km per hour for 2 hours, animal motion adds  $1,053*5.5*2=11,583 \text{ km}^2$  to the area. Using the risk function to calculate the expected range outside the speed of advance adds another  $11,295 \text{ km}^2$ , bringing the total upper-bound of the affected area to  $445,143 \text{ km}^2$ .

For this analysis, short-finned pilot whales have an average winter density of 0.00005 animals per km<sup>2</sup>, so the upper bound number short-finned pilot whales that can be affected by 53C activity in the NWTRC during a 24-hour period is 445,143 \*0.00005=22.3 whales.

In the first ping, 0.00022128 short-finned pilot whales will be harassed. With the second ping,

$$0.00022128 \left( \frac{22.3 - 0.00022128}{22.3} \right) = 0.0002212778$$
 short-finned pilot whales will be harassed.

Using the formula derived above, after 2 hours of continuous operation, the remaining unharassed

population is 
$$P_{240} = P_0 \left( 1 - \left( \frac{h}{P_0} \right) \right)^{240} = 22.3 \left( 1 - \left( \frac{.00022128}{22.3} \right) \right)^{240} \approx 22.25$$

So the **harassed** population will be 22.3-22.25 = 0.05 animals.

Contrast this with linear accumulation of harassments without consideration of the local population and the dilution of the unharassed population:

Harassments = 0.00022128 \* 240 = 0.053 animals

The difference in harassments is very small, as a percentage of total harassments, because the size of the NWTRC implies a large "harassable" population relative to the harassment per ping of the 53C. In cases where the harassable population is not as large, with respect to the per ping harassments, the difference in harassments between linear accumulation and density dilution is more pronounced.

# D.7.2 Land Shadow

The risk function considers harassment possible if the animal population receives 120 dB SPL, or above. In the open ocean of the NWTRC, this can occur as far away as 150 km, so over a large "effect" area, sonar sound could, but does not necessarily, harass an animal. The harassment calculations for a general modeling case must assume that this effect area covers only water fully populated with animals, but in some portions of the NWTRC, land partially encroaches on the area, obstructing sound propagation.

As discussed in the introduction of this section, Navy planners do not know the exact location and transmission direction of the sonars at future times. These factors however, completely determine the interference of the land with the sound, or "land shadow," so a general modeling approach does not have enough information to compute the land shadow effects directly. However, modelers can predict the reduction in harassments at any point due to land shadow for different pointing directions and use

expected probability distribution of activity to calculate the average land shadow for operations in each range.

For each of the coastal points that are within 150 km of the grid, the azimuth and distance is computed. In the computation, only the minimum range at each azimuth is computed. The minimum range compared with azimuth for the sample point is shown in Figure D-25.

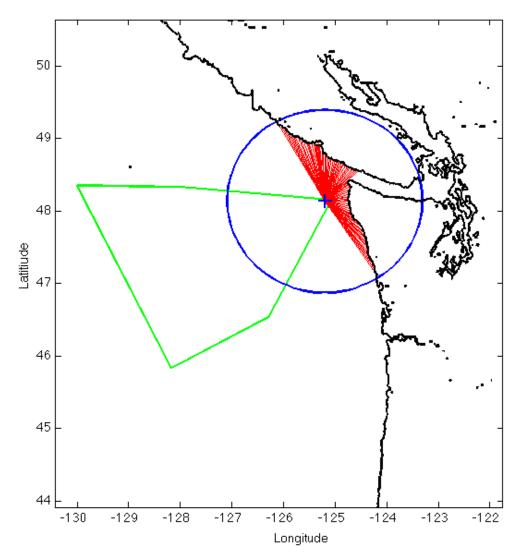


Figure D-25. The nearest point at each azimuth (with 1° spacing) to a sample grid point (red circle) is shown by the green lines.

Now, the average of the distances to shore, along with the angular profile of land is computed (by summing the unique azimuths that intersect the coast) for each grid point. The values are then used to compute the land shadow for the grid points.

#### D.7.2.1 Computing the Land Shadow Effect at Each Grid Point

The effect of land shadow is computed by determining the levels, and thus the distances from the sources, that the harassments occur. Table D-12 and Figure D-26 give a mathematical extrapolation of the distances and levels at which harassments occur, with average propagation in the NWTRC.

Received Level Distance at which Levels **Percent of Behavioral Harassments** (dB SPL) Occur in NWTRC **Occurring at Given Levels** Below 140 51 km - 130 km < 1% 140<Level<150 25 km - 51 km 2% 150<Level<160 10 km - 25 km 18% 160<Level<170 3 km - 10 km 43% 170<Level<180 560 m - 3 km 28% Above 180 dB 0 m - 560 m< 9%

Table D-12. Behavioral Harassments at each Received Level Band from 53C

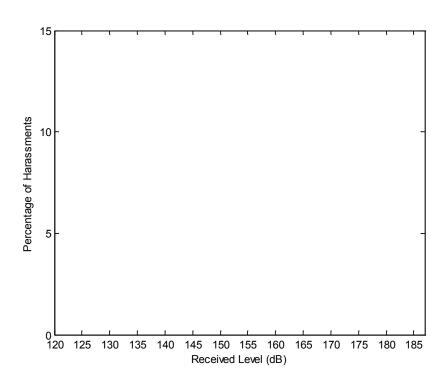


Figure D-26. Approximate Percentage of Behavioral Harassments for Every 5 Degree Band of Received Level from the 53C

With the data used to produce the previous figure, the average effect reduction across season for a sound path blocked by land can be calculated. For the 53C, since approximately 81% of harassments occur within 10 km of the source (Figure D-27), a sound path blocked by land at 10 km will, on average, cause approximately 81% of the effect of an unblocked path.

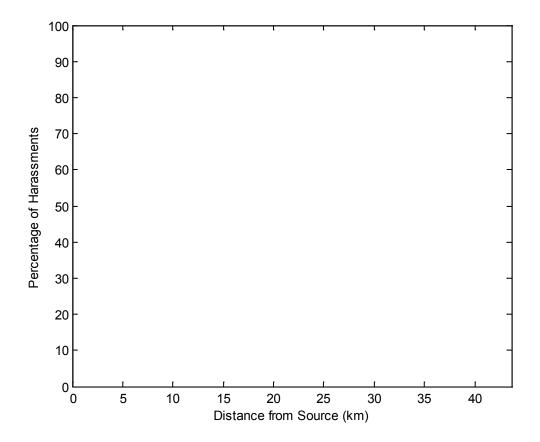


Figure D-27. Average Percentage of Harassments Occurring Within a Given Distance

As described above, the mapping process determines the angular profile of and distance to the coastline(s) from each grid point. The distance, then, determines the reduction due to land shadow when the sonar is pointed in that direction. The angular profile, then, determines the probability that the sonar is pointed at the coast.

Define  $\theta n$  = angular profile of coastline at point n in radians

Define rn = mean distance to shoreline

Define A(r) = average effect adjustment factor for sound blocked at distance r

The land shadow at point n can be approximated by  $A(r_n)\theta_n/(2\pi)$ . For illustration, Figures D-28 and D-29 give the land shadow reduction factor at each point in each range area for the 53C. The white portions of these figures indicate the areas outside the range and the blue lines indicate the coastline. The color plots inside the ranges give the land shadow factor at each point. The average land shadow factor from the 53C for the NWTRC is 0.9992 and for the special case of harbor porpoises is 0.9116; the reduction in effect is 0.0008% for the former and 8.84% for the latter. For the other, lower-power sources, this reduction is negligible.

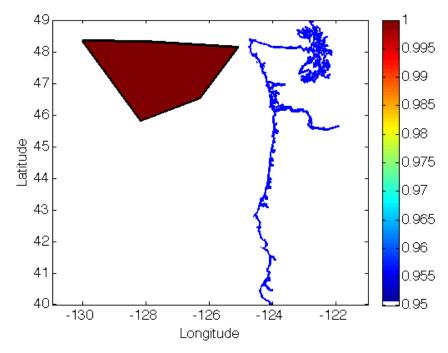


Figure D-28. Depiction of Land Shadow over Warning Area 237

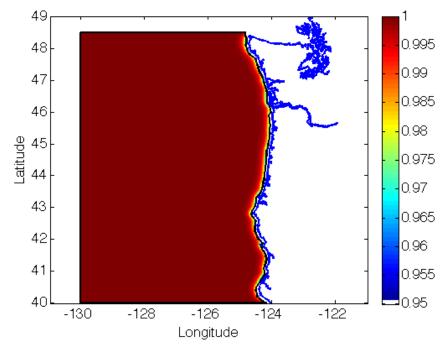


Figure D-29. Depiction of Land Shadow over NWTRC

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# Appendix E

Cetacean Stranding Report

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# E CETACEAN STRANDING REPORT

#### E.1 CETACEAN STRANDINGS AND THREATS

Strandings can involve a single animal or several to hundreds of animals. An event where animals are found out of their normal habitat may be considered a stranding even though animals do not necessarily end up beaching (such as the July 2004 "Hanalei Mass Stranding Event"; Southall et al., 2006). Several hypotheses have been given for the mass strandings which include the impact of shallow beach slopes on odontocete echolocation, disease or parasites, geomagnetic anomalies that affect navigation, following a food source in close to shore, avoiding predators, social interactions that cause other cetaceans to come to the aid of stranded animals, and human actions. Generally, inshore species do not strand in large numbers, but generally just as individual animals. This may be due to their familiarity with the coastal area. By contrast, pelagic species that are unfamiliar with obstructions or sea bottom tend to strand more often in larger numbers (Woodings, 1995). The Navy has studied several stranding events in detail that may have occurred in association with Navy sonar activities. To better understand the causal factors in stranding events that may be associated with Navy sonar activities, the main factors - including bathymetry (i.e. steep drop-offs), narrow channels (less than 35 nm), environmental conditions (e.g. surface ducting) and multiple sonar ships (see Section on Stranding Events Associated with Navy Sonar) - were compared among the different stranding events.

#### E.1.1 What is a Stranded Marine Mammal?

When a live or dead marine mammal swims or floats onto shore and becomes "beached" or incapable of returning to sea, the event is termed a "stranding" (Geraci et al., 1999; Perrin and Geraci, 2002; Geraci and Lounsbury, 2005; NMFS, 2007). The legal definition for a stranding within the U.S. is that "a marine mammal is dead and is (i) on a beach or shore of the United States; or (ii) in waters under the jurisdiction of the United States (including any navigable waters); or (B) a marine mammal is alive and is (i) on a beach or shore of the United States and is unable to return to the water; (ii) on a beach or shore of the United States and, although able to return to the water, is in need of apparent medical attention; or (iii) in the waters under the jurisdiction of the United States (including any navigable waters), but is unable to return to its natural habitat under its own power or without assistance." (16 United States Code [U.S.C.] section 1421h).

The majority of animals that strand are dead or moribund (NMFS, 2007). For animals that strand alive, human intervention through medical aid and/or guidance seaward may be required for the animal to return to the sea. If unable to return to sea, rehabilitation at an appropriate facility may be determined as the best opportunity for animal survival. An event where animals are found out of their normal habitat may be considered a stranding depending on circumstances even though the animals do not necessarily end up beaching (Southhall, 2006).

Three general categories can be used to describe strandings: single, mass and unusual mortality events. The most frequent type of stranding involves only one animal (or a mother/calf pair) (NMFS, 2007).

Mass stranding involves two or more marine mammals of the same species other than a mother/calf pair (Wilkinson, 1991), and may span one or more days and range over several miles (Simmonds and Lopez-Jurado, 1991; Frantzis, 1998; Walsh et al., 2001; Freitas, 2004). In North America, only a few species typically strand in large groups of 15 or more and include sperm whales, pilot whales, false killer whales, Atlantic white-sided dolphins, white-beaked dolphins and rough-toothed dolphins (Odell 1987, Walsh et al., 2001). Some species, such as pilot whales, false-killer whales and melon-headed whales occasionally strand in groups of 50 to 150 or more (Geraci et al., 1999). All of these normally pelagic off-shore species are highly sociable and infrequently encountered in coastal waters. Species that commonly strand in smaller numbers include pygmy killer whales, common dolphins, bottlenose dolphins, Pacific white-sided dolphin Frasier's dolphins, gray whales and humpback whales (West Coast only), harbor porpoise,

Cuvier's beaked whales, California sea lions and harbor seals (Mazzuca et al., 1999, Norman et al., 2004, Geraci and Lounsbury, 2005).

Unusual mortality events (UMEs) can be a series of single strandings or mass strandings, or unexpected mortalities (i.e., die-offs) that occur under unusual circumstances (Dierauf and Gulland, 2001; Harwood, 2002; Gulland, 2006; NMFS, 2007). These events may be interrelated: for instance, at-sea die-offs lead to increased stranding frequency over a short period of time, generally within one to two months. As published by the NMFS, revised criteria for defining a UME include (71 FR 75234, 2006):

- (1) A marked increase in the magnitude or a marked change in the nature of morbidity, mortality or strandings when compared with prior records.
- (2) A temporal change in morbidity, mortality or strandings is occurring.
- (3) A spatial change in morbidity, mortality or strandings is occurring.
- (4) The species, age, or sex composition of the affected animals is different than that of animals that are normally affected.
- (5) Affected animals exhibit similar or unusual pathologic findings, behavior patterns, clinical signs or general physical condition (e.g., blubber thickness).
- (6) Potentially significant morbidity, mortality or stranding is observed in species, stocks or populations that are particularly vulnerable (e.g., listed as depleted, threatened or endangered or declining). For example, stranding of three or four right whales may be cause for great concern whereas stranding of a similar number of fin whales may not.
- (7) Morbidity is observed concurrent with or as part of an unexplained continual decline of a marine mammal population, stock or species.

UMEs are usually unexpected, infrequent and may involve a significant number of marine mammal mortalities. As discussed below, unusual environmental conditions are probably responsible for most UMEs and marine mammal die-offs (Vidal and Gallo-Reynoso, 1996; Geraci et al., 1999; Walsh et al., 2001; Gulland and Hall, 2005).

# **E.1.2 United States Stranding Response Organization**

Stranding events provide scientists and resource managers information not available from limited at-sea surveys, and may be the only way to learn key biological information about certain species such as distribution, seasonal occurrence and health (Rankin, 1953; Moore et al., 2004; Geraci and Lounsbury, 2005). Necropsies are useful in attempting to determine a reason for the stranding, and are performed on stranded animals when the situation and resources allow.

In 1992, Congress amended the MMPA to establish the Marine Mammal Health and Stranding Response Program (MMHSRP) under authority of the NMFS. The MMHSRP was created out of concern started in the 1980s for marine mammal mortalities, to formalize the response process and to focus efforts being initiated by numerous local stranding organizations and as a result of public concern.

Major elements of the MMHSRP include (NMFS, 2007):

- National Marine Mammal Stranding Network
- Marine Mammal UME Program

- National Marine Mammal Tissue Bank (NMMTB) and Quality Assurance Program
- Marine Mammal Health Biomonitoring, Research and Development
- Marine Mammal Disentanglement Network
- John H. Prescott Marine Mammal Rescue Assistance Grant Program (a.k.a. the Prescott Grant Program)
- Information Management and Dissemination.

The United States has a well-organized network in coastal states to respond to marine mammal strandings. Overseen by the NMFS, the National Marine Mammal Stranding Network is comprised of smaller organizations manned by professionals and volunteers from nonprofit organizations, aquaria, universities and state and local governments trained in stranding response animal health and diseased investigation. Currently, 141 organizations are authorized by NMFS to respond to marine mammal strandings (National Marine Fisheries Service, 2007o). Through a National Coordinator and six regional coordinators, NMFS authorizes and oversees stranding response activities and provides specialized training for the network.

NMFS Regions and Associated States and Territories

NMFS Northeast Region- ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, VA

NMFS Southeast Region- NC, SC, GA, FL, AL, MS, LA, TX, PR, VI

NMFS Southwest Region- CA

NMFS Northwest Region- OR, WA

NMFS Alaska Region- AK

NMFS Pacific Islands Region- HI, Guam, American Samoa, Commonwealth of the Northern Mariana Islands (CNMI)

Stranding reporting and response efforts over time have been inconsistent, although effort and data quality within the U.S. have been improving within the last 20 years (NMFS, 2007). Given the historical inconsistency in response and reporting, however, interpretation of long-term trends in marine mammal stranding is difficult (NMFS, 2007). Nationwide, between 1995-2004, there were approximately 700-1500 cetacean strandings per year and between 2000-4600 pinniped strandings per year (NMFS, 2007). Detailed regional stranding information including most commonly stranded species can be found in Zimmerman (1991), Geraci and Lounsbury (2005), and NMFS (2007).

Stranding data is presented in Table E-1 and Figure E-1 below.

Table E-1. Cetacean And Pinniped Stranding Count By NMFS Region 2001-2004.

NMFS Region	# of Cetaceans	# of Pinnipeds
Northeast	1,620	4,050
Southeast	2,830	45
Southwest	12,900	45
Northwest	188	1,430
Alaska	269	348
Pacific Islands	59	10
Four Year Total	17,866	5,928

Source: NMFS 2007

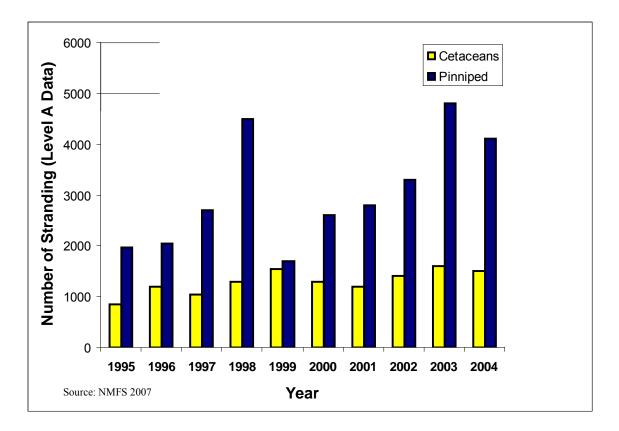


Figure E-1. United States Annual Cetacean And Pinniped Stranding From 1995-2004.

# **E.1.3 Unusual Mortality Events (UMEs)**

From 1991 to the present, there have been 45 formally recognized UMEs in the U.S. The UMEs have either involved single or multiple species and dozens to hundreds of individual marine mammals per event (NOAA Fisheries, Office of Protected Resources 2008). Table E-2 contains a list of documented UMEs in and along the Pacific coast of the U.S.

# E.1.4 Threats to Marine Mammals and Potential Causes for Stranding

Reports of marine mammal strandings can be traced back to ancient Greece (Walsh et al., 2001). Like any wildlife population, there are normal background mortality rates that influence marine mammal population dynamics, including starvation, predation, aging, reproductive success and disease (Geraci et al., 1999; Carretta et al., 2007). Strandings in and of themselves may be reflective of this natural cycle or, more recently, may be the result of anthropogenic sources (i.e., human impacts). Current science suggests that multiple factors, both natural and man-made, may be acting alone or in combination to cause a marine mammal to strand (Geraci et al., 1999; Culik, 2002; Perrin and Geraci, 2002; Hoelzel, 2003; Geraci and Lounsbury, 2005; NRC, 2006). While post-stranding data collection and necropsies of dead animals are attempted in an effort to find a possible cause for the stranding, it is often difficult to pinpoint exactly one factor that can be blamed for any given stranding. An animal suffering from one ailment becomes susceptible to various other influences because of its weakened condition, making it difficult to determine a primary cause. In many stranding cases, scientists never learn the exact reason for the stranding.

Table E-2. Documented UMEs within the United States.

Year	Composition	Determination
1993	Harbor seals, Steller sea lions, and California sea lions on the central Washington coast	Human Interaction
1993/1994	Bottlenose dolphins in the Gulf of Mexico	Morbillivirus
1994	Common dolphins in California	Cause not determined
1996	Right whales off Florida/Georgia coast	Evidence of human interactions
1996	Manatees on the west coast of Florida	Brevetoxin
1996	Bottlenose dolphins in Mississippi	Cause not determined
1997	Harbor seals in California	Unknown infectious respiratory disease
1997	Pinnipeds on the Pacific coast	El Niño
1998	California sea lions in central California	Harmful algal bloom; Domoic acid
1999	Harbor porpoises on the East Coast	Determined not to meet criteria for UME because of multiplicity of causes
1999/2000	Bottlenose dolphins in the Panhandle of Florida	Harmful algal bloom is suspected; still under investigation
1999/2000	Gray whales from Alaska to Mexico	Still under investigation
2004	Bottlenose dolphins along the Florida Panhandle	Uncertain, red tide is suspected
2005	Bottlenose dolphins, manatees, sea turtles, and seabirds in west central Florida	Unknown

Source: NMFS 2007

Specific potential stranding causes can include both natural and human influenced (anthropogenic) causes listed below and described in the following sections:

Natural Stranding Causes

Disease

Natural toxins

Weather and climatic influences

Navigation errors

Social cohesion

Predation

Human Influenced (Anthropogenic) Stranding Causes

Fisheries interaction

Vessel strike

Pollution and ingestion

Noise

# E.1.4.1 Natural Stranding Causes

Significant natural causes of mortality, die-offs and stranding discussed below include disease and parasitism; marine neurotoxins from algae; navigation errors that lead to inadvertent stranding; and climatic influences that impact the distribution and abundance of potential food resources (i.e., starvation). Other natural mortality not discussed in detail includes predation by other species such as sharks (Cockcroft et al., 1989; Heithaus, 2001), killer whales (Constantine et al., 1998; Guinet et al., 2000; Pitman et al., 2001) and some species of pinniped (Hiruki et al., 1999; Robinson et al., 1999).

#### Disease

Like other mammals, marine mammals frequently suffer from a variety of diseases of viral, bacterial, parasitic and fungal origin (Visser et al., 1991; Dunn et al., 2001; Harwood, 2002). Gulland and Hall (2005) provide a more detailed summary of individual and population effects of marine mammal diseases.

Microparasites such as bacteria, viruses and other microorganisms are commonly found in marine mammal habitats and usually pose little threat to a healthy animal (Geraci et al., 1999). For example, long-finned pilot whales that inhabit the waters off the northeastern coast of the U.S. are carriers of the morbillivirus, yet have grown resistant to its usually lethal effects (Geraci et al., 1999). Since the 1980s, however, virus infections have been strongly associated with marine mammal die-offs (Domingo et al., 1992; Geraci and Lounsbury, 2005). Morbillivirus is the most significant marine mammal virus and suppresses a host's immune system, increasing risk of secondary infection (Harwood, 2002). A bottlenose dolphin UME in 1993 and 1994 was caused by infectious disease. Die-offs ranged from northwestern Florida to Texas, with an increased number of deaths as it spread (NMFS, 2007c). A 2004 UME in Florida was also associated with dolphin morbillivirus (NMFS, 2004). Influenza A was responsible for the first reported mass mortality in the U.S., occurring along the coast of New England in 1979-1980 (Geraci et al., 1999; Harwood, 2002). Canine distemper virus (a type of morbillivirus) has been responsible for large scale pinniped mortalities and die-offs (Grachev et al., 1989; Kennedy et al., 2000; Gulland and Hall, 2005), while a bacteria, Leptospira pomona, is responsible for periodic die-offs in California sea lions about every four years (Gulland et al., 1996; Gulland and Hall, 2005). It is difficult to determine whether microparasites commonly act as a primary pathogen, or whether they show up as a secondary infection in an already weakened animal (Geraci et al., 1999). Most marine mammal die-offs from infectious disease in the last 25 years, however, have had viruses associated with them (Simmonds and Mayer, 1997; Geraci et al., 1999; Harwood, 2002).

Macroparasites are usually large parasitic organisms and include lungworms, trematodes (parasitic flatworms), and protozoans (Geraci and St. Aubin, 1987; Geraci et al., 1999). Marine mammals can carry many different types and have shown a robust tolerance for sizeable infestation unless compromised by illness, injury or starvation (Morimitsu et al., 1987; Dailey et al., 1991; Geraci et al., 1999). Nasitrema, a usually benign trematode found in the head sinuses of cetaceans (Geraci et al., 1999), can cause brain damage if it migrates (Ridgway and Dailey, 1972). As a result, this worm is one of the few directly linked to stranding in the cetaceans (Dailey and Walker, 1978; Geraci et al., 1999).

Non-infectious disease, such as congenital bone pathology of the vertebral column (osteomyelitis, spondylosis deformans, and ankylosing spondylitis [AS]), has been described in several species of cetacean (Paterson, 1984; Alexander et al., 1989; Kompanje, 1995; Sweeny et al., 2005). In humans, bone pathology such as AS, can impair mobility and increase vulnerability to further spinal trauma (Resnick and Niwayama, 2002). Bone pathology has been found in cases of single strandings (Paterson, 1984; Kompanje, 1995), and also in cetaceans prone to mass stranding (Sweeny et al., 2005), possibly acting as a contributing or causal influence in both types of events.

# Naturally Occurring Marine Neurotoxins

Some single-cell marine algae common in coastal waters, such as dinoflagellates and diatoms, produce toxic compounds that can accumulate (termed bioaccumulation) in the flesh and organs of fish and invertebrates (Geraci et al., 1999; Harwood, 2002). Marine mammals become exposed to these compounds when they eat prey contaminated by these naturally produced toxins although exposure can also occur through inhalation and skin contact (Van Dolah, 2005). Figure E-2 shows U.S. animal mortalities from 1997-2006 resulting from toxins produced during harmful algal blooms.

In the Gulf of Mexico and mid- to southern Atlantic states, "red tides," a form of harmful algal bloom, are created by a dinoflagellate (*Karenia brevis*). *K. brevis* is found throughout the Gulf of Mexico and sometimes along the Atlantic coast (Van Dolah 2005; NMFS 2007). It produces a neurotoxin known as brevetoxin. Brevetoxin has been associated with several marine mammal UMEs within this area (Geraci, 1989; Van Dolah et al., 2003; NMFS, 2004; Flewelling et al., 2005; Van Dolah, 2005; NMFS, 2007). On the U.S. West Coast and in the northeast Atlantic, several species of diatoms produce a toxin called domoic acid which has also been linked to marine mammal strandings (Geraci et al., 1999; Van Dolah et al., 2003; Greig et al., 2005; Van Dolah, 2005; Brodie et al., 2006; NMFS, 2007; Bargu et al., 2008; Goldstein et al., 2008). Other algal toxins associated with marine mammal strandings include saxitoxins and ciguatoxins and are summarized by Van Dolah (2005).

# Weather events and climate influences

Severe storms, hurricanes, typhoons and prolonged temperature extremes may lead to localized marine mammal strandings (Geraci et al., 1999; Walsh et al., 2001). Hurricanes may have been responsible for mass strandings of pygmy killer whales in the British Virgin Islands and Gervais' beaked whales in North Carolina (Mignucci-Giannoni et al., 2000; Norman and Mead, 2001). Storms in 1982-1983 along the California coast led to deaths of 2,000 northern elephant seal pups (Le Boeuf and Reiter, 1991). Ice movement along southern Newfoundland has forced groups of blue whales and white-beaked dolphins ashore (Sergeant, 1982). Seasonal oceanographic conditions in terms of weather, frontal systems and local currents may also play a role in stranding (Walker et al., 2005).

The effect of large-scale climatic changes to the world's oceans and how these changes impact marine mammals and influence strandings is difficult to quantify given the broad spatial and temporal scales involved and the cryptic movement patterns of marine mammals (Moore, 2005; Learmonth et al., 2006). The most immediate, although indirect, effect is decreased prey availability during unusual conditions. This, in turn, results in increased search effort required by marine mammals (Crocker et al., 2006), potential starvation if not successful and corresponding stranding due directly to starvation or succumbing to disease or predation while in a more weakened, stressed state (Selzer and Payne, 1988; Geraci et al., 1999; Moore, 2005; Learmonth et al., 2006; Weise et al., 2006).

Two recent papers examined potential influences of climate fluctuation on stranding events in southern Australia, including Tasmania, an area with a history of more than 20 mass stranding since the 1920s (Evans et al., 2005; Bradshaw et al., 2006). These authors note that patterns in animal migration, survival, fecundity, population size and strandings will revolve around the availability and distribution of food resources. In southern Australia, movement of nutrient-rich waters pushed closer to shore by periodic meridinal winds (occurring about every 12 to 14 years) may be responsible for bringing marine mammals closer to land, thus increasing the probability of stranding (Bradshaw et al., 2006). The papers conclude, however, that while an overarching model can be helpful for providing insight into the prediction of strandings, the particular reasons for each one are likely to be quite varied.



Source: Woods Hole Oceanographic Institute (WHO) http://www.whoi.edu/redtide/HABdistribution/HABmap.html

Figure E-2. Animal Mortalities from Harmful Algal Blooms within the U.S., 1997-2006.

#### Navigation Error

Geomagnetism – It has been hypothesized that, like some land animals, marine mammals may be able to orient to the Earth's magnetic field as a navigational cue, and that areas of local magnetic anomalies may influence strandings (Bauer et al., 1985; Klinowska, 1985; Kirschvink et al., 1986; Klinowska, 1986; Walker et al., 1992; Wartzok and Ketten, 1999). In a plot of live stranding positions in Great Britain with magnetic field maps, Klinowska (1985; 1986) observed an association between live stranding positions and magnetic field levels. In all cases, live strandings occurred at locations where magnetic minima, or lows in the magnetic fields, intersect the coastline. Kirschvink et al. (1986) plotted stranding locations on a map of magnetic data for the East Coast of the U.S., and were able to develop associations between stranding sites and locations where magnetic minima intersected the coast. The authors concluded that there were highly significant tendencies for cetaceans to beach themselves near these magnetic minima and coastal intersections. The results supported the hypothesis that cetaceans may have a magnetic sensory system similar to other migratory animals, and that marine magnetic topography and patterns may influence long-distance movements (Kirschvink et al., 1986). Walker et al. (1992) examined fin whale swim patterns off the northeastern U.S. continental shelf, and reported that migrating animals aligned with lows in the geometric gradient or intensity. While a similar pattern between magnetic features and marine mammal strandings at New Zealand stranding sites was not seen (Brabyn and Frew, 1994), mass strandings in Hawaii typically were found to occur within a narrow range of magnetic anomalies (Mazzuca et al., 1999).

Echolocation Disruption in Shallow Water - Some researchers believe stranding may result from reductions in the effectiveness of echolocation within shallow water, especially with the pelagic species of odontocetes that may be less familiar with coastline (Dudok van Heel, 1966; Chambers and James, 2005). For an odontocete, echoes from echolocation signals contain important information on the

location and identity of underwater objects and the shoreline. The authors postulate that the gradual slope of a beach may present difficulties to the navigational systems of some cetaceans, since it is common for live strandings to occur along beaches with shallow, sandy gradients (Brabyn and McLean, 1992; Mazzuca et al., 1999; Maldini et al., 2005; Walker et al., 2005). A contributing factor to echolocation interference in turbulent, shallow water is the presence of microbubbles from the interaction of wind, breaking waves and currents. Additionally, ocean water near the shoreline can have an increased turbidity (e.g., floating sand or silt, particulate plant matter, etc.) due to the run-off of fresh water into the ocean, either from rainfall or from freshwater outflows (e.g., rivers and creeks). Collectively, these factors can reduce and scatter the sound energy within echolocation signals and reduce the perceptibility of returning echoes of interest.

## Social cohesion

Many pelagic species such as sperm whale, pilot whales, melon-head whales and false killer whales and some dolphins occur in large groups with strong social bonds between individuals. When one or more animals strand due to any number of causative events, then the entire pod may follow suit out of social cohesion (Geraci et al., 1999; Conner ,2000; Perrin and Geraci, 2002; NMFS, 2007).

# E.1.4.2 Anthropogenic Stranding Causes and Potential Risks

With the exception of historic whaling in the 19th and early part of the 20th century, over the past few decades there has been an increase in marine mammal mortalities associated with a variety of human activities (Geraci et al., 1999; NMFS, 2007). These include fisheries interactions (bycatch and directed catch), pollution (marine debris, toxic compounds), habitat modification (degradation, prey reduction), direct trauma (vessel strikes, gunshots) and noise. Figure E-3 show potential worldwide risk to small toothed cetaceans by source.

#### Fisheries Interaction: By-Catch, Directed Catch, and Entanglement

The incidental catch of marine mammals in commercial fisheries is a significant threat to the survival and recovery of many populations of marine mammals (Geraci et al., 1999; Baird, 2002; Culik, 2002; Carretta et al., 2004; Geraci and Lounsbury, 2005; NMFS, 2007). Interactions with fisheries and entanglement in discarded or lost gear continue to be a major factor in marine mammal deaths worldwide (Geraci et al., 1999; Nieri et al., 1999; Geraci and Lounsbury, 2005; Read et al., 2006; Zeeber et al., 2006). For instance, baleen whales and pinnipeds have been found entangled in nets, ropes, monofilament line and other fishing gear that had been discarded out at sea (Geraci et al., 1999; Campagna et al., 2007).

Bycatch - Bycatch is the catching of non-target species within a given fishing operation and can include non-commercially used invertebrates, fish, sea turtles, birds and marine mammals (NRC 2006). Read et al. (2006) attempted to estimate the magnitude of marine mammal bycatch in U.S. and global fisheries. Data on marine mammal bycatch within the United States was obtained from fisheries observer programs, reports of entangled stranded animals and fishery logbooks, and was then extrapolated to estimate global bycatch by using the ratio of U.S. fishing vessels to the total number of vessels within the world's fleet (Read et al., 2006). Within U.S. fisheries, between 1990 and 1999 the mean annual bycatch of marine mammals was 6,215 animals, with a standard error of +/- 448 (Read et al., 2006). Eighty-four percent of cetacean bycatch occurred in gill-net fisheries, with dolphins and porpoises constituting most of the cetacean bycatch (Read et al., 2006). Over the decade there was a 40 percent decline in marine mammal bycatch, which was significantly lower from 1995-1999 than it was from 1990-1994 (Read et al., 2006). Read et al. (2006) suggests that this is primarily due to effective conservation measures that were implemented during this period.

Read et al. (2006) then extrapolated this data for the same time period and calculated an annual estimate of 653,365 of marine mammals globally, with most of the world's bycatch occurring in gill-net fisheries. With global marine mammal bycatch likely to be in the hundreds of thousands every year, bycatch in

fisheries is the single greatest threat to many marine mammal populations around the world (Read et al., 2006).

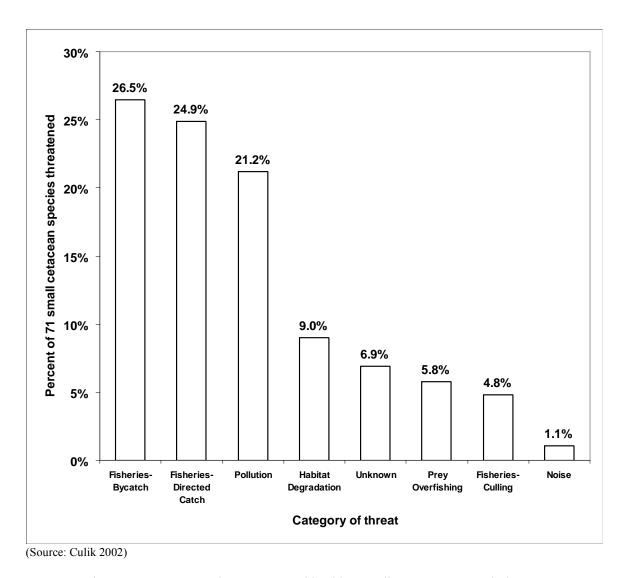


Figure E-3. Human Threats to World Wide Small Cetacean Populations

Entanglement - Entanglement in active fishing gear is a major cause of death or severe injury among the endangered whales in the action area. Entangled marine mammals may die as a result of drowning, escape with pieces of gear still attached to their bodies, manage to be set free either of their own accord, or are set free by fishermen. Many large whales carry off gear after becoming entangled (Read et al., 2006). Many times when a marine mammal swims off with gear attached, the end result can be fatal. The gear may be become too cumbersome for the animal or it can be wrapped around a crucial body part and tighten over time. Stranded marine mammals frequently exhibit signs of previous fishery interaction, such as scarring or gear attached to their bodies, and the cause of death for many stranded marine mammals is often attributed to such interactions (Baird and Gorgone, 2005). Because marine mammals that die or are injured in fisheries may not wash ashore and because not all animals that do wash ashore exhibit clear signs of interactions, stranding data probably underestimate fishery-related mortality and serious injury (NMFS, 2005a).

From 1993 through 2003, 1,105 harbor porpoises were reported stranded from Maine to North Carolina, many of which had cuts and body damage suggestive of net entanglement (NMFS, 2005e). In 1999 it was possible to determine that the cause of death for 38 of the stranded porpoises was fishery interactions, with one additional animal having been mutilated (right flipper and fluke cut off) (NMFS, 2005e). In 2000, one stranded porpoise was found with monofilament line wrapped around its body (NMFS, 2005e). In 2003, nine stranded harbor porpoises were attributed to fishery interactions, with an additional three mutilated animals (NMFS, 2005e). An estimated 78 baleen whales were killed annually in the offshore Southern California/Oregon drift gillnet fishery during the 1980s (Heyning and Lewis, 1990). From 1998-2005, based on observer records, five fin whales (CA/OR/WA stock), 12 humpback whales (ENP stock), and six sperm whales (CA/OR/WA stock) were either seriously injured or killed in fisheries off the mainland West Coast of the U.S. (California Marine Mammal Stranding Network Database, 2006).

#### Ship Strike

Vessel strikes to marine mammals are another cause of mortality and stranding (Laist et al., 2001; Geraci and Lounsbury, 2005; de Stephanis and Urquiola, 2006). An animal at the surface could be struck directly by a vessel, a surfacing animal could hit the bottom of a vessel, or an animal just below the surface could be cut by a vessel's propeller. The severity of injuries typically depends on the size and speed of the vessel (Knowlton and Kraus, 2001; Laist et al., 2001; Vanderlaan and Taggart, 2007).

An examination of all known ship strikes from all shipping sources (civilian and military) indicates vessel speed is a principal factor in whether a vessel strike results in death (Knowlton and Kraus, 2001; Laist et al., 2001, Jensen and Silber, 2003; Vanderlaan and Taggart, 2007). In assessing records in which vessel speed was known, Laist et al. (2001) found a direct relationship between the occurrence of a whale strike and the speed of the vessel involved in the collision. The authors concluded that most deaths occurred when a vessel was traveling in excess of 13 knots, although most vessels do travel greater than 15 knots. Jensen and Silber (2003) detailed 292 records of known or probable ship strikes of all large whale species from 1975 to 2002. Of these, vessel speed at the time of collision was reported for 58 cases. Of these cases, 39 (or 67 percent) resulted in serious injury or death (19 or 33 percent resulted in serious injury as determined by blood in the water, propeller gashes or severed tailstock, and fractured skull, jaw, vertebrae, hemorrhaging, massive bruising or other injuries noted during necropsy and 20 or 35 percent resulted in death). Operating speeds of vessels that struck various species of large whales ranged from 2 to 51 knots. The majority (79 percent) of these strikes occurred at speeds of 13 knots or greater. The average speed that resulted in serious injury or death was 18.6 knots. Pace and Silber (2005) found that the probability of death or serious injury increased rapidly with increasing vessel speed. Specifically, the predicted probability of serious injury or death increased from 45 percent to 75 percent as vessel speed increased from 10 to 14 knots, and exceeded 90 percent at 17 knots. Higher speeds during collisions result in greater force of impact, but higher speeds also appear to increase the chance of severe injuries or death by pulling whales toward the vessel. Computer simulation modeling showed that hydrodynamic forces pulling whales toward the vessel hull increase with increasing speed (Clyne, 1999; Knowlton et al., 1995).

The growth in civilian commercial ports and associated commercial vessel traffic is a result in the globalization of trade. The Final Report of the NOAA International Symposium on "Shipping Noise and Marine Mammals: A Forum for Science, Management, and Technology" stated that the worldwide commercial fleet has grown from approximately 30,000 vessels in 1950 to more than 85,000 vessels in 1998 (NRC, 2003; Southall, 2005). Between 1950 and 1998, the U.S.-flagged fleet declined from approximately 25,000 to fewer than 15,000 and currently represents only a small portion of the world fleet. From 1985 to 1999, world seaborne trade doubled to 5 billion tons and currently includes 90 percent of the total world trade, with container shipping movements representing the largest volume of seaborne trade. It is unknown how international shipping volumes and densities will continue to grow. However, current statistics support the prediction that the international shipping fleet will continue to grow at the current rate or at greater rates in the future. Shipping densities in specific areas and trends in routing and

vessel design are as, or more, significant than the total number of vessels. Densities along existing coastal routes are expected to increase both domestically and internationally. New routes are also expected to develop as new ports are opened and existing ports are expanded. Vessel propulsion systems are also advancing toward faster ships operating in higher sea states for lower operating costs; and container ships are expected to become larger along certain routes (Southall, 2005).

While there are reports and statistics of whales struck by vessels in U.S. waters, the magnitude of the risks of commercial ship traffic poses to marine mammal populations is difficult to quantify or estimate. In addition, there is limited information on vessel strike interactions between ships and marine mammals outside of U.S. waters (de Stephanis and Urquiola, 2006). Laist et al. (2001) concluded that ship collisions may have a negligible effect on most marine mammal populations in general, except for regional-based small populations where the significance of low numbers of collisions would be greater given smaller populations or populations segments.

U.S. Navy vessel traffic is a small fraction of the overall U.S. commercial and fishing vessel traffic. While U.S. Navy vessel movements may contribute to the ship strike threat, given the lookout and mitigation measures adopted by the U.S. Navy, probability of vessel strikes is greatly reduced. Furthermore, actions to avoid close interaction of U.S. Navy ships and marine mammals and sea turtles, such as maneuvering to keep away from any observed marine mammal and sea turtle are part of existing at-sea protocols and standard operating procedures. Navy ships have up to three or more dedicated and trained lookouts as well as two to three bridge watchstanders during at-sea movements who would be searching for any whales, sea turtles or other obstacles on the water surface. Such lookouts are expected to further reduce the chances of a collision.

# Commercial and Private Marine Mammal Viewing

In addition to vessel operations, private and commercial vessels engaged in marine mammal watching also have the potential to impact marine mammals in Southern California. NMFS has promulgated regulations at 50 CFR 224.103, which provide specific prohibitions regarding wildlife viewing activities. In addition, NMFS launched an education and outreach campaign to provide commercial operators and the general public with responsible marine mammal viewing guidelines. In January 2002, NMFS also published an official policy on human interactions with wild marine mammals which states: "NOAA Fisheries cannot support, condone, approve or authorize activities that involve closely approaching, interacting or attempting to interact with whales, dolphins, porpoises, seals or sea lions in the wild. This includes attempting to swim, pet, touch or elicit a reaction from the animals."

Although considered by many to be a non-consumptive use of marine mammals with economic, recreational, educational and scientific benefits, marine mammal watching is not without potential negative impacts. One concern is that animals become more vulnerable to vessel strikes once they habituate to vessel traffic (Swingle et al., 1993; Wiley et al., 1995). Another concern is that preferred habitats may be abandoned if disturbance levels are too high. A whale's behavioral response to whale watching vessels depends on the distance of the vessel from the whale, vessel speed, vessel direction, vessel noise and the number of vessels (Amaral and Carlson, 2005; Au and Green, 2000; Cockeron, 1995; Erbe, 2002; Felix, 2001; Magalhaes et al., 2002; Richter et al., 2003; Schedat et al., 2004; Simmonds, 2005; Watkins, 1986; Williams et al., 2002). The whale's responses changed with these different variables and, in some circumstances, the whales did not respond to the vessels, but in other circumstances, whales changed their vocalizations surface time, swimming speed, swimming angle or direction, respiration rates, dive times, feeding behavior and social interactions. In addition to the information on whale watching, there is also direct evidence of pinniped haul out site (Pacific harbor seals) abandonment because of human disturbance at Strawberry Spit in San Francisco Bay (Allen, 1991).

## Ingestion of Plastic Objects and Other Marine Debris and Toxic Pollution Exposure

For many marine mammals, debris in the marine environment is a great hazard and can be harmful to wildlife. Not only is debris a hazard because of possible entanglement, animals may mistake plastics and other debris for food (NMFS, 2007g). U.S. Navy vessels have a zero-plastic discharge policy and return all plastic waste to appropriate disposition on shore.

There are certain species of cetaceans, along with Florida manatees, that are more likely to eat trash, especially plastics, which is usually fatal for the animal (Geraci et al., 1999). From 1990 through October 1998, 215 pygmy sperm whales stranded along the U.S. Atlantic Coast from New York through the Florida Keys (NMFS, 2005a). Remains of plastic bags and other debris were found in the stomachs of 13 of these animals (NMFS, 2005a). During the same period, 46 dwarf sperm whale strandings occurred along the U.S. Atlantic coastline between Massachusetts and the Florida Keys (NMFS, 2005d). In 1987 a pair of latex examination gloves was retrieved from the stomach of a stranded dwarf sperm whale (NMFS, 2005d). One hundred twenty-five pygmy sperm whales were reported stranded from 1999 to 2003 between Maine and Puerto Rico; in one pygmy sperm whale found stranded in 2002, red plastic debris was found in the stomach along with squid beaks (NMFS, 2005a).

Sperm whales have been known to ingest plastic debris, such as plastic bags (Evans et al., 2003; Whitehead, 2003). While this has led to mortality, the scale to which this is affecting sperm whale populations is unknown, but Whitehead (2003) suspects it is not substantial at this time.

High concentrations of potentially toxic substances within marine mammals along with an increase in new diseases have been documented in recent years. Scientists have begun to consider the possibility of a link between pollutants and marine mammal mortality events. NMFS takes part in a marine mammal biomonitoring program not only to help assess the health and contaminant loads of marine mammals, but also to assist in determining anthropogenic impacts on marine mammals, marine food chains and marine ecosystem health. Using strandings and bycatch animals, the program provides tissue/serum archiving, samples for analyses, disease monitoring and reporting and additional response during disease investigations (NMFS, 2007).

The impacts of these activities are difficult to measure. However, some researchers have correlated contaminant exposure to possible adverse health effects in marine mammals. Contaminants such as organochlorines do not tend to accumulate in significant amounts in invertebrates, but do accumulate in fish and fish-eating animals. Thus, contaminant levels in planktivorous mysticetes have been reported to be one to two orders of magnitude lower compared to piscivorous odontocetes (Borell, 1993; O'Shea and Brownell, 1994; O'Hara and Rice, 1996; O'Hara et al., 1999).

The manmade chemical PCB (polychlorinated biphenyl), and the pesticide DDT (dichlorodiphyenyltrichloroethane), are both considered persistent organic pollutants that are currently banned in the United States for their harmful effects in wildlife and humans (NMFS, 2007c). Despite having been banned for decades, the levels of these compounds are still high in marine mammal tissue samples taken along U.S. coasts (NMFS, 2007c). Both compounds are long-lasting, reside in marine mammal fat tissues (especially in the blubber), and can be toxic, causing effects such as reproductive impairment and immunosuppression (NMFS, 2007c).

Both long-finned and short-finned pilot whales have a tendency to mass strand throughout their range. Short-finned pilot whales have been reported as stranded as far north as Rhode Island, and long-finned pilot whales as far south as South Carolina (NMFS, 2005b). For U.S. East Coast stranding records, both species are lumped together and there is rarely a distinction between the two because of uncertainty in species identification (NMFS, 2005b). Since 1980 within the Northeast region alone, between 2 and 120 pilot whales have stranded annually either individually or in groups (NMFS, 2005b). Between 1999 and 2003 from Maine to Florida, 126 pilot whales were reported stranded, including a mass stranding of 11

animals in 2000 and another mass stranding of 57 animals in 2002, both along the Massachusetts coast (NMFS, 2005b).

It is unclear how much of a role human activities play in these pilot whale strandings, and toxic poisoning may be a potential human-caused source of mortality for pilot whales (NMFS, 2005b). Moderate levels of PCBs and chlorinated pesticides (such as DDT, DDE and dieldrin) have been found in pilot whale blubber (NMFS, 2005b). Bioaccumulation levels have been found to be more similar in whales from the same stranding event than from animals of the same age or sex (NMFS, 2005b). Numerous studies have measured high levels of toxic metals (mercury, lead and cadmium), selenium and PCBs in pilot whales in the Faroe Islands (NMFS, 2005b). Population effects resulting from such high contamination levels are currently unknown (NMFS, 2005b).

Habitat contamination and degradation may also play a role in marine mammal mortality and strandings. Some events caused by man have direct and obvious effects on marine mammals, such as oil spills (Geraci et al., 1999). But in most cases, effects of contamination will more than likely be indirect in nature, such as effects on prey species availability or by increasing disease susceptibility (Geraci et al., 1999).

U.S. Navy vessel operation between ports and exercise locations has the potential for release of small amounts of pollutant discharges into the water column. U.S. Navy vessels are not a typical source, however, of either pathogens or other contaminants with bioaccumulation potential such as pesticides and PCBs. Furthermore, any vessel discharges such as bilge water and deck runoff associated with the vessels would be in accordance with international and U.S. requirements for eliminating or minimizing discharges of oil, garbage and other substances, and not likely to contribute significant changes to ocean water quality.

# Deep Water Ambient Noise

Urick (1983) provided a discussion of the ambient noise spectrum expected in the deep ocean. Shipping, seismic activity and weather, are the primary causes of deep-water ambient noise. The ambient noise frequency spectrum can be predicted fairly accurately for most deep-water areas based primarily on known shipping traffic density and wind state (wind speed, Beaufort wind force or sea state) (Urick, 1983). For example, for frequencies between 100 and 500 Hz, Urick (1983) estimated the average deep water ambient noise spectra to be 73 to 80 dB for areas of heavy shipping traffic and high sea states, and 46 to 58 dB for light shipping and calm seas.

## Shallow Water Ambient Noise

In contrast to deep water, ambient noise levels in shallow waters (i.e., coastal areas, bays, harbors, etc.) are subject to wide variations in level and frequency depending on time and location. The primary sources of noise include distant shipping and industrial activities, wind and waves, marine animals (Urick, 1983). At any give time and place, the ambient noise is a mixture of all of these noise variables. In addition, sound propagation is also affected by the variable shallow water conditions, including the depth, bottom slope and type of bottom. Where the bottom is reflective, the sound levels tend to be higher, than when the bottom is absorptive.

### Noise from Aircraft and Vessel Movement

Surface shipping is the most widespread source of anthropogenic, low frequency (0 to 1,000 Hz) noise in the oceans and may contribute to over 75 percent of all human sound in the sea (Simmonds and Hutchinson, 1996, ICES, 2005b). Ross (1976) has estimated that between 1950 and 1975, shipping had caused a rise in ambient noise levels of 10 dB. He predicted that this would increase by another 5 dB by the beginning of the 21st century. The National Resource Council (1997) estimated that the background ocean noise level at 100 Hz has been increasing by about 1.5 dB per decade since the advent of propeller-driven ships. Michel et al. (2001) suggested an association between long-term exposure to low-frequency

sounds from shipping and an increased incidence of marine mammal mortalities caused by collisions with ships.

Sound from a low-flying helicopter or airplane may be heard by marine mammals and turtles while at the surface or underwater. Due to the transient nature of sounds from aircraft involved in at-sea operations, such sounds would not likely cause physical effects but have the potential to affect behaviors. Responses by mammals and turtles could include hasty dives or turns or decreased foraging (Soto et al., 2006). Whales may also slap the water with flukes or flippers or swim away from the aircraft track.

Sound emitted from large vessels, particularly in the course of transit, is the principal source of noise in the ocean today, primarily due to the properties of sound emitted by civilian cargo vessels (Richardson et al., 1995; Arveson and Vendittis, 2000). Ship propulsion and electricity generation engines, engine gearing, compressors, bilge and ballast pumps, as well as hydrodynamic flow surrounding a ship's hull and any hull protrusions contribute to a large vessel's noise emission into the marine environment. Propellor-driven vessels also generate noise through cavitation, which accounts for much of the noise emitted by a large vessel depending on its travel speed. Military vessels underway or involved in naval operations or exercises also introduce anthropogenic noise into the marine environment. Noise emitted by large vessels can be characterized as low-frequency, continuous and tonal. The sound pressure levels at the vessel will vary according to speed, burden, capacity and length (Richardson et al., 1995; Arveson and Vendittis, 2000). Vessels ranging from 135 to 337 meters generate peak source sound levels from 169 to 200 dB between 8 Hz and 430 Hz, although Arveson and Vendittis (2000) documented components of higher frequencies (10-30 kHz) as a function of newer merchant ship engines and faster transit speeds.

Whales have variable responses to vessel presence or approaches, ranging from apparent tolerance to diving away. Unfortunately, it is not always possible to determine whether the whales are responding to the vessel itself or the noise generated by the engine and cavitation around the propeller. Apart from some disruption of behavior, an animal may be unable to hear other sounds in the environment due to masking by the noise from the vessel. Any masking of environmental sounds or conspecific sounds is expected to be temporary, as noise dissipates with a vessel transit through an area.

Vessel noise primarily raises concerns for masking of environmental and conspecific cues. However, exposure to vessel noise of sufficient intensity and/or duration can also result in temporary or permanent loss of sensitivity at a given frequency range, referred to as temporary or permanent threshold shifts (TTS or PTS). Threshold shifts are assumed to be possible in marine mammal species as a result of prolonged exposure to large vessel traffic noise due to its intensity, broad geographic range of effectiveness and constancy.

Collectively, significant cumulative exposure to individuals, groups, or populations can occur if they exhibit site fidelity to a particular area; for example, whales that seasonally travel to a regular area to forage or breed may be more vulnerable to noise from large vessels compared to transiting whales. Any permanent threshold shift in a marine animal's hearing capability, especially at particular frequencies for which it can normally hear best, can impair its ability to perceive threats, including ships. Whales have variable responses to vessel presence or approaches, ranging from apparent tolerance to diving away from a vessel. It is not possible to determine whether the whales are responding to the vessel itself or the noise generated by the engine and cavitation around the propeller. Apart from some disruption of behavior, an animal may be unable to hear other sounds in the environment due to masking by the noise from the vessel.

Most observations of behavioral responses of marine mammals to human-generated sounds have been limited to short-term behavioral responses, which included the cessation of feeding, resting, or social

interactions. Nowacek et al. (2007) provide a detailed summary of cetacean response to underwater noise.

Given the sound propagation of low-frequency sounds, a large vessel in this sound range can be heard 139 to 463 kilometers away (Ross, 1976 in Polefka, 2004). U.S. Navy vessels, however, have incorporated significant underwater ship quieting technology to reduce their acoustic signatures (compared to a similarly sized vessel) in order to reduce their vulnerability to detection by enemy passive acoustics (Southall, 2005). Therefore, the potential for TTS or PTS from U.S. Navy vessel and aircraft movement is extremely low given, that the exercises and training events are transitory in time, with vessels moving over large areas of the ocean. A marine mammal or sea turtle is unlikely to be exposed long enough at high levels for TTS or PTS to occur. Any masking of environmental sounds or conspecific sounds is expected to be temporary, as noise dissipates with a U.S. Navy vessel transiting through an area. If behavioral disruptions result from the presence of aircraft or vessels, it is expected to be temporary. Animals are expected to resume their migration, feeding, or other behaviors without any threat to their survival or reproduction. However, if an animal is aware of a vessel and dives or swims away, it may successfully avoid being struck.

# E.1.5 Stranding Events Associated with Navy Sonar

There are two classes of sonars employed by the U.S. Navy: active sonars and passive sonars. Most active military sonars operate in a limited number of areas, and are most likely not a significant contributor to a comprehensive global ocean noise budget (ICES, 2005b).

The effects of mid-frequency active naval sonar on marine wildlife have not been studied as extensively as the effects of air-guns used in seismic surveys (Madsen et al., 2006; Stone and Tasker, 2006; Wilson et al., 2006; Palka and Johnson, 2007; Parente et al., 2007). Maybaum (1989, 1993) observed changes in behavior of humpbacks during playback tapes of the M-1002 system (using 203 dB re 1  $\mu$ Pa-m for study); specifically, a decrease in respiration, submergence and aerial behavior rates; and an increase in speed of travel and track linearity. Direct comparison of Maybaum's results, however, with U.S Navy mid-frequency active sonar are difficult to make. Maybaum's signal source, the commercial M-1002, operated differently from naval mid-frequency sonar. In addition, behavioral responses were observed during playbacks of a control tape, (i.e. a tape with no sound signal) so interpretation of Maybaum's results are inconclusive.

Research by Nowacek, et al. (2004) on North Atlantic right whales using a whale alerting signal designed to alert whales to human presence suggests that received sound levels of only 133 to 148 pressure level (decibel [dB] re 1 microPascals [ $\mu$ Pa]) for the duration of the sound exposure may disrupt feeding behavior. The authors did note, however, that within minutes of cessation of the source, a return to normal behavior would be expected. Direct comparison of the Nowacek et al. (2004) sound source to MFA sonar, however, is not possible given the radically different nature of the two sources. Nowacek et al.'s source was a series of non-sonar-like sounds designed to purposely alert the whale, lasting several minutes, and covering a broad frequency band. Direct differences between Nowacek et al. (2004) and MFA sonar is summarized below from Nowacek et al. (2004) and Nowacek et al. (2007):

- (1) Signal duration: Time difference between the two signals is significant, 18-minute signal used by Nowacek et al. versus < 1 sec for MFA sonar.
- (2) Frequency modulation: Nowacek et al. contained three distinct signals containing frequency modulated sounds:

1st - alternating 1-sec pure tone at 500 and 850 Hz

2nd - 2-sec logarithmic down-sweep from 4500 to 500 Hz

3rd - pair of low-high (1500 and 2000 Hz) sine wave tones amplitude modulated at 120 Hz

- (3) Signal-to-noise ratio: Nowacek et al.'s signal maximized signal-to-noise ratio so that it would be distinct from ambient noise and resist masking.
- (4) Signal acoustic characteristics: Nowacek et al.'s signal comprised of disharmonic signals spanning northern right whales' estimated hearing range.

Given these differences, therefore, the exact cause of apparent right whale behavior noted by the authors cannot be attributed to any one component, since the source was such a mix of signal types.

The effects of naval sonar on marine wildlife have not been studied as extensively as have the effects of airguns used in seismic surveys (Nowacek et al., 2007). In the Caribbean, sperm whales were observed to interrupt their activities by stopping echolocation and leaving the area in the presence of underwater sounds surmised to have originated from submarine sonar signals (Watkins and Schevill, 1975; Watkins et al., 1985). The authors did not report receive levels from these exposures, and also got a similar reaction from artificial noise they generated by banging on their boat hull. It was unclear if the sperm whales were reacting to the sonar signal itself or to a potentially new unknown sound in general. Madsen et al. (2006) tagged and monitored eight sperm whales in the Gulf of Mexico exposed to seismic airgun surveys. Sound sources were from approximately 2 to 7 nm (4 to 13 km) away from the whales and based on multipath propagation, RLs were as high as 162 dB re 1 uPa with energy content greatest between 0.3 and 3.0 kHz. Sperm whales engaged in foraging dives continued the foraging dives throughout exposure to these seismic pulses. In the Caribbean Sea, sperm whales avoided exposure to mid-frequency submarine sonar pulses, in the range 1000 Hz to 10,000 Hz (IWC 2005). Sperm whales have also moved out of areas after the start of airgun seismic testing (Davis et al., 1995). In contrast, during playback experiments off the Canary Islands, André et al. (1997) reported that foraging sperm whales exposed to a 10 kHz pulsed signal did not exhibit any general avoidance reactions.

The Navy sponsored tests of the effects of low-frequency active (LFA) sonar source, between 100 Hz and 1,000 Hz, on blue, fin and humpback whales. The tests demonstrated that whales exposed to sound levels up to 155 dB did not exhibit significant disturbance reactions, though there was evidence that humpback whales altered their vocalization patterns in reaction to the noise. Given that the source level of the Navy's LFA is reported to be in excess of 215 dB, the possibility exists that animals in the wild may be exposed to sound levels much higher than 155 dB.

Acoustic exposures have been demonstrated to kill marine mammals and result in physical trauma and injury (Ketten, 2005). Animals in or near an intense noise source can die from profound injuries related to shock wave or blast effects. Acoustic exposures can also result in noise-induced hearing loss that is a function of the interactions of three factors: sensitivity, intensity and frequency. Loss of sensitivity is referred to as a threshold shift; the extent and duration of a threshold shift depends on a combination of several acoustic features and is specific to particular species (TTS or PTS, depending on how the frequency, intensity and duration of the exposure combine to produce damage). In addition to direct physiological effects, noise exposures can impair an animal's sensory abilities (masking) or result in behavioral responses such as aversion or attraction (see Section 3.19).

Acoustic exposures can also result in the death of an animal by impairing its foraging, ability to detect predators or communicate, or by increasing stress and disrupting important physiological events. Whales have moved away from their feeding and mating grounds (Bryant et al., 1984; Morton and Symnods, 2002; Weller et al., 2002), moved away from their migration route (Richardson et al., 1995), and have changed their calls due to noise (Miller et al., 2000). Acoustic exposures such as MFA sonar tend to be infrequent, temporary in nature, and therefore effects are likely indirect and to be short lived. In situations such as the alteration of gray whale migration routes in response to shipping and whale

watching boats, those acoustic exposures were chronic over several years (Moore and Clarke, 2002). This was also true of the effect of seismic survey airguns (daily for 39 days) on the use of feeding areas by gray whales in the western North Pacific although whales began returning to the feeding area within one day of the end of the exposure (Weller et al., 2002).

Below are evaluations of the general information available on the variety of ways in which cetaceans and pinnipeds have been reported to respond to sound, generally, and mid-frequency sonar, in particular.

The Navy is very concerned and thoroughly investigates each marine mammal stranding potentially associated with Navy activities to better understand the events surrounding strandings (Norman, 2006). Strandings can involve a single animal or several to hundreds. An event where animals are found out of their normal habitat may be considered a stranding even though animals do not necessarily end up beaching (such as the July 2004 "Hanalei Mass Stranding Event"; Southall et al., 2006). Several hypotheses have been given for the mass strandings which include the impact of shallow beach slopes on odontocete sonar, disease or parasites, geomagnetic anomalies that affect navigation, following a food source in close to shore, avoiding predators, social interactions that cause other cetaceans to come to the aid of stranded animals, and human actions. Generally, inshore species do not strand in large numbers but generally just as a single animal. This may be due to their familiarity with the coastal area whereas pelagic species that are unfamiliar with obstructions or sea bottom tend to strand more often in larger numbers (Woodings, 1995). The Navy has studied several stranding events in detail that may have occurred in association with Navy sonar activities. To better understand the causal factors in stranding events that may be associated with Navy sonar activities, the main factors, including bathymetry (i.e., steep drop offs), narrow channels (less than 35 nm), environmental conditions (e.g., surface ducting), and multiple sonar ships were compared between the different stranding events.

When a marine mammal swims or floats onto shore and becomes "beached" or stuck in shallow water, it is considered a "stranding" (MMPA section 410 (16 USC section 1421g; NMFS, 2007a). NMFS explains that "a cetacean is considered stranded when it is on the beach, dead or alive, or in need of medical attention while free-swimming in U.S. waters. A pinniped is considered to be stranded either when dead or when in distress on the beach and not displaying normal haul-out behavior" (NMFS, 2007b).

Over the past three decades, several "mass stranding" events [strandings involving two or more individuals of the same species (excluding a single cow-calf pair) and at times, individuals from different species] that have occurred have been associated with naval operations, seismic surveys, and other anthropogenic activities that introduce sound into the marine environment (Canary Islands, Greece, Vieques, U.S. Virgin Islands, Madeira Islands, Haro Strait, Washington State, Alaska, Hawaii, North Carolina).

Information was collected on mass stranding events (events in which two or more cetaceans stranded) that have occurred and for which reports are available, from the past 40 years. Any causal agents that have been associated with those stranding events were also identified (Table 2-5). Major range events undergo name changes over the years, however, the equivalent of COMPTUEX and JTFEX have been conducted in Southern California since 1934. Training involving sonar has been conducted since World War II and sonar systems described in the SOCAL EIS/OEIS since the 1970s (Jane's 2005).

## **E.1.6 Stranding Analysis**

Over the past two decades, several mass stranding events involving beaked whales have been documented. While beaked whale strandings have been reported since the 1800s (Geraci and Lounsbury, 1993; Cox et al., 2006; Podesta et al., 2006), several mass strandings since have been associated with naval operations that may have included mid-frequency sonar (Simmonds and Lopez-Jurado, 1991; Frantzis, 1998; Jepson et al., 2003; Cox et al., 2006). As Cox et al. (2006) concludes, the state of science cannot yet determine if a sound source such as mid-frequency sonar alone causes beaked whale

strandings, or if other factors (acoustic, biological or environmental) must co-occur in conjunction with a sound source.

A review of historical data (mostly anecdotal) maintained by the Marine Mammal Program in the National Museum of Natural History, Smithsonian Institution, reports 49 beaked whale mass stranding events between 1838 and 1999. The largest beaked whale mass stranding occurred in the 1870s in New Zealand when 28 Gray's beaked whales (*Mesoplodon grayi*) stranded. Blainsville's beaked whale (*Mesoplodon densirostris*) strandings are rare, and records show that they were involved in one mass stranding in 1989 in the Canary Islands. Cuvier's beaked whales (*Ziphius cavirostris*) are the most frequently reported beaked whale to strand, with at least 19 stranding events from 1804 through 2000 (DoC and DoN, 2001; Smithsonian Institution, 2000).

The discussion below centers on those worldwide stranding events that may have some association with naval operations, and global strandings that the U.S. Navy feels are either inconclusive or cannot be associated with naval operations.

#### E.1.6.1 Naval Association

In the following sections, specific stranding events that have been putatively linked to potential sonar operations are discussed. Of note, these events represent a small number of animals over an 11-year period (40 animals), and not all worldwide beaked whale strandings can be linked to naval activity (ICES, 2005a; 2005b; Podesta et al., 2006). Four of the five events occurred during NATO exercises or events where U.S. Navy presence was limited (Greece, Portugal, Spain). One of the five events involved only U.S. Navy ships (Bahamas).

Beaked whale stranding events associated with potential naval operations.

1996 May Greece (NATO)

2000 March Bahamas (US)

2000 May Portugal, Madeira Islands (NATO/US)

2002 September Spain, Canary Islands (NATO/US)

2006 January Spain, Mediterranean Sea coast (NATO/US)

# Case Studies of Stranding Events (coincidental with or implicated with naval sonar) 1996 Greece Beaked Whale Mass Stranding (May 12–13, 1996)

<u>Description</u>: Twelve Cuvier's beaked whales (*Ziphius cavirostris*) stranded along a 38.2-kilometer strand of the coast of the Kyparissiakos Gulf on May 12 and 13, 1996 (Frantzis, 1998). From May 11 through May 15, the NATO research vessel Alliance was conducting sonar tests with signals of 600 Hz and 3 kHz and root-mean-squared (rms) sound pressure levels (SPL) of 228 and 226 dB re: 1μPa, respectively (D'Amico and Verboom, 1998; D'Spain et al., 2006). The timing and the location of the testing encompassed the time and location of the whale strandings (Frantzis, 1998).

<u>Findings</u>: Partial necropsies of eight of the animals were performed, including external assessments and the sampling of stomach contents. No abnormalities attributable to acoustic exposure were observed, but the stomach contents indicated that the whales were feeding on cephalopods soon before the stranding event. No unusual environmental events before or during the stranding event could be identified (Frantzis, 1998).

Conclusions: The timing and spatial characteristics of this stranding event were atypical of stranding in Cuvier's beaked whale, particularly in this region of the world. No natural phenomenon that might contribute to the stranding event coincided in time with the mass stranding. Because of the rarity of mass strandings in the Greek Ionian Sea, the probability that the sonar tests and stranding coincided in time and location, while being independent of each other, was estimated as being extremely low (Frantzis, 1998). However, because information for the necropsies was incomplete and inconclusive, the cause of the stranding cannot be precisely determined.

## 2000 Bahamas Marine Mammal Mass Stranding (March 15-16, 2000)

<u>Description</u>: Seventeen marine mammals - Cuvier's beaked whales, Blainville's beaked whales (*Mesoplodon densirostris*), minke whale (*Balaenoptera acutorostrata*), and one spotted dolphin (*Stenella frontalis*) - stranded along the Northeast and Northwest Providence Channels of the Bahamas Islands on March 15-16, 2000 (Evans and England, 2001). The strandings occurred over a 36-hour period and coincided with U.S. Navy use of mid-frequency active sonar within the channel. Navy ships were involved in tactical sonar exercises for approximately 16 hours on March 15. The ships, which operated the AN/SQS-53C and AN/SQS-56, moved through the channel while emitting sonar pings approximately every 24 seconds. The timing of pings was staggered between ships and average source levels of pings varied from a nominal 235 dB SPL (AN/SQS-53C) to 223 dB SPL (AN/SQS-56). The center frequency of pings was 3.3 kHz and 6.8 to 8.2 kHz, respectively.

Seven of the animals that stranded died, while ten animals were returned to the water alive. The animals known to have died included five Cuvier's beaked whales, one Blainville's beaked whale, and the single spotted dolphin. Six necropsies were performed and three of the six necropsied animals (one Cuvier's beaked whale, one Blainville's beaked whale, and the spotted dolphin) were fresh enough to permit identification of pathologies by computerized tomography (CT). Tissues from the remaining three animals were in a state of advanced decomposition at the time of inspection.

<u>Findings</u>: The spotted dolphin demonstrated poor body condition and evidence of a systemic debilitating disease. In addition, since the dolphin stranding site was isolated from the acoustic activities of Navy ships, it was determined that the dolphin stranding was unrelated to the presence of Navy active sonar.

All five necropsied beaked whales were in good body condition and did not show any signs of external trauma or disease. In the two best preserved whale specimens, hemorrhage was associated with the brain and hearing structures. Specifically, subarachnoid hemorrhage within the temporal region of the brain and intracochlear hemorrhages were noted. Similar findings of bloody effusions around the ears of two other moderately decomposed whales were consistent with the same observations in the freshest animals. In addition, three of the whales had small hemorrhages in their acoustic fats, which are fat bodies used in sound production and reception (i.e., fats of the lower jaw and the melon). The best-preserved whale demonstrated acute hemorrhage within the kidney, inflammation of the lung and lymph nodes and congestion and mild hemorrhage in multiple other organs. Other findings were consistent with stresses and injuries associated with the stranding process. These consisted of external scrapes, pulmonary edema and congestion.

<u>Conclusions</u>: The post-mortem analyses of stranded beaked whales lead to the conclusion that the immediate cause of death resulted from overheating, cardiovascular collapse and stresses associated with being stranded on land. However, subarachnoid and intracochlear hemorrhages were believed to have occurred prior to stranding and were hypothesized as being related to an acoustic event. Passive acoustic monitoring records demonstrated that no large-scale acoustic activity besides the Navy sonar exercise occurred in the times surrounding the stranding event. The mechanism by which sonar could have caused the observed traumas or caused the animals to strand was undetermined. The spotted dolphin was in overall poor condition for examination, but showed indications of long-term disease. No analysis of

baleen whales (minke whale) was conducted. Baleen whale stranding events have not been associated with either low-frequency or mid-frequency sonar use (ICES 2005a, 2005b).

# 2000 Madeira Island, Portugal Beaked Whale Strandings (May 10–14, 2000)

<u>Description</u>: Three Cuvier's beaked whales stranded on two islands in the Madeira Archipelago, Portugal, from May 10 to 14, 2000 (Cox et al., 2006). A joint NATO amphibious training exercise, named "Linked Seas 2000," which involved participants from 17 countries, took place in Portugal during May 2 to 15, 2000. The timing and location of the exercises overlapped with that of the stranding incident.

<u>Findings</u>: Two of the three whales were necropsied. Two heads were taken to be examined. One head was intact and examined grossly and by CT; the other was only grossly examined because it was partially flensed and had been seared from an attempt to dispose of the whale by fire (Ketten, 2005).

No blunt trauma was observed in any of the whales. Consistent with prior CT scans of beaked whales stranded in the Bahamas 2000 incident, one whale demonstrated subarachnoid and peribullar hemorrhage and blood within one of the brain ventricles. Post-cranially, the freshest whale demonstrated renal congestion and hemorrhage, which was also consistent with findings in the freshest specimens in the Bahamas incident.

<u>Conclusions</u>: The pattern of injury to the brain and auditory system were similar to those observed in the Bahamas strandings, as were the kidney lesions and hemorrhage and congestion in the lungs (Ketten, 2005). The similarities in pathology and stranding patterns between these two events suggested a similar causative mechanism. Although the details about whether or how sonar was used during "Linked Seas 2000" is unknown, the presence of naval activity within the region at the time of the strandings suggested a possible relationship to Navy activity.

# 2002 Canary Islands Beaked Whale Mass Stranding (September 24, 2002)

<u>Description</u>: On September 24, 2002, 14 beaked whales stranded on Fuerteventura and Lanzaote Islands in the Canary Islands (Jepson et al., 2003). Seven of the 14 whales died on the beach and the other seven were returned to the ocean. Four beaked whales were found stranded dead over the next three days either on the coast or floating offshore (Fernández et al., 2005). At the time of the strandings, an international naval exercise (Neo-Tapon, 2002) that involved numerous surface warships and several submarines was being conducted off the coast of the Canary Islands. Tactical mid-frequency active sonar was utilized during the exercises, and strandings began within hours of the onset of the use of mid-frequency sonar (Fernández et al., 2005).

<u>Findings</u>: Eight Cuvier's beaked whales, one Blainville's beaked whale, and one Gervais' beaked whale were necropsied; six of them within 12 hours of stranding (Fernández et al., 2005). The stomachs of the whales contained fresh and undigested prey contents. No pathogenic bacteria were isolated from the whales, although parasites were found in the kidneys of all of the animals. The head and neck lymph nodes were congested and hemorrhages were noted in multiple tissues and organs, including the kidney, brain, ears and jaws. Widespread fat emboli were found throughout the carcasses, but no evidence of blunt trauma was observed in the whales. In addition, the parenchyma of several organs contained macroscopic intravascular bubbles and lesions, putatively associated with nitrogen off-gassing.

<u>Conclusions</u>: The association of NATO mid-frequency sonar use close in space and time to the beaked whale strandings and the similarity between this stranding event and previous beaked whale mass strandings coincident with sonar use suggest that a similar scenario and causative mechanism of stranding may be shared between the events. Beaked whales stranded in this event demonstrated brain and auditory system injuries, hemorrhages and congestion in multiple organs, similar to the pathological findings of

the Bahamas and Madeira stranding events. In addition, the necropsy results of the Canary Islands stranding event lead to the hypothesis that the presence of disseminated and widespread gas bubbles and fat emboli were indicative of nitrogen bubble formation, similar to what might be expected in decompression sickness (Jepson et al., 2003; Fernández et al., 2005). Whereas gas emboli would develop from the nitrogen gas, fat emboli would enter the blood stream from ruptured fat cells (presumably where nitrogen bubble formation occurs) or through the coalescence of lipid bodies within the blood stream.

The possibility that the gas and fat emboli found by Fernández et al. (2005) was due to nitrogen bubble formation has been hypothesized to be related to either direct activation of the bubble by sonar signals or to a behavioral response in which the beaked whales flee to the surface following sonar exposure. The first hypothesis is related to rectified diffusion (Crum and Mao, 1996), the process of increasing the size of a bubble by exposing it to a sound field. This process is facilitated if the environment in which the ensonified bubbles exist is supersaturated with gas. Repetitive diving by marine mammals can cause the blood and some tissues to accumulate gas to a greater degree than is supported by the surrounding environmental pressure (Ridgway and Howard, 1979). Deeper and longer dives of some marine mammals, such as those conducted by beaked whales, are theoretically predicted to induce greater levels of supersaturation (Houser et al., 2001). If rectified diffusion were possible in marine mammals exposed to high-level sound, conditions of tissue supersaturation could theoretically speed the rate and increase the size of bubble growth. Subsequent effects due to tissue trauma and emboli would presumably mirror those observed in humans suffering from decompression sickness. It is unlikely that the brief duration of sonar pings would be long enough to drive bubble growth to any substantial size, if such a phenomenon occurs. However, an alternative but related hypothesis has also been suggested: stable bubbles could be destabilized by high-level sound exposures such that bubble growth then occurs through static diffusion of gas out of the tissues. In such a scenario the marine mammal would need to be in a gas-supersaturated state long enough for bubbles to become of a problematic size. The second hypothesis speculates that rapid ascent to the surface following exposure to a startling sound might produce tissue gas saturation sufficient for the evolution of nitrogen bubbles (Jepson et al., 2003; Fernández et al., 2005). In this scenario, the rate of ascent would need to be sufficiently rapid to compromise behavioral or physiological protections against nitrogen bubble formation. Tyack et al. (2006) showed that beaked whales often make rapid ascents from deep dives, suggesting that it is unlikely that beaked whales would suffer from decompression sickness. Zimmer and Tyack (2007) speculated that if repetitive shallow dives that are used by beaked whales to avoid a predator or a sound source, they could accumulate high levels of nitrogen because they would be above the depth of lung collapse (above about 210 feet) and could lead to decompression sickness. There is no evidence that beaked whales dive in this manner in response to predators or sound sources and other marine mammals such as Antarctic and Galapagos fur seals, and pantropical spotted dolphins make repetitive shallow dives with no apparent decompression sickness (Kooyman and Trillmich, 1984; Kooyman et al., 1984; Baird et al., 2001).

Although theoretical predictions suggest the possibility for acoustically mediated bubble growth, there is considerable disagreement among scientists as to its likelihood (Piantadosi and Thalmann, 2004). Sound exposure levels predicted to cause *in vivo* bubble formation within diving cetaceans have not been evaluated and are suspected as needing to be very high (Evans, 2002; Crum et al., 2005). Moore and Early (2004) reported that in analysis of sperm whale bones spanning 111 years, gas embolism symptoms were observed, indicating that sperm whales may be susceptible to decompression sickness due to natural diving behavior. Further, although it has been argued that traumas from recent beaked whale strandings are consistent with gas emboli and bubble-induced tissue separations (Jepson et al., 2003), there is no conclusive evidence supporting this hypothesis and there is concern that at least some of the pathological findings (e.g., bubble emboli) are artifacts of the necropsy. Currently, stranding networks in the United States have agreed to adopt a set of necropsy guidelines to determine, in part, the possibility and frequency with which bubble emboli can be introduced into marine mammals during necropsy procedures (Arruda et al., 2007).

# 2006 Spain, Gulf of Vera Beaked Whale Mass Stranding (26-27 January 2006)

<u>Description</u>: The Spanish Cetacean Society reported an atypical mass stranding of four beaked whales that occurred January 26-28, 2006, on the southeast coast of Spain near Mojacar (Gulf of Vera) in the Western Mediterranean Sea. According to the report, two of the whales were discovered the evening of January 26 and were found to be still alive. Two other whales were discovered on January 27, but had already died. A following report stated that the first three animals were located near the town of Mojacar and were examined by a team from the University of Las Palmas de Gran Canarias, with the help of the stranding network of Ecologistas en Acción Almería-PROMAR and others from the Spanish Cetacean Society. The fourth animal was found dead on the afternoon of January 27, a few kilometers north of the first three animals.

From January 25-26, 2006, a NATO surface ship group (seven ships including one U.S. ship under NATO operational command) conducted active sonar training against a Spanish submarine within 50 nm of the stranding site.

Findings: Veterinary pathologists necropsied the two male and two female beaked whales (*Z. cavirostris*).

<u>Conclusions</u>: According to the pathologists, a likely cause of this type of beaked whale mass stranding event may have been anthropogenic acoustic activities. However, no detailed pathological results confirming this supposition have been published to date, and no positive acoustic link was established as a direct cause of the stranding.

Even though no causal link can be made between the stranding event and naval exercises, certain conditions may have existed in the exercise area that, in their aggregate, may have contributed to the marine mammal strandings (Freitas, 2004):

- Operations were conducted in areas of at least 1,000 meters in depth near a shoreline where there is a rapid change in bathymetry on the order of 1,000 to 6,000 meters occurring a cross a relatively short horizontal distance (Freitas, 2004).
- Multiple ships, in this instance, five MFA sonar equipped vessels, were operating in the same area over extended periods (20 hours) in close proximity.
- Exercises took place in an area surrounded by landmasses, or in an embayment. Operations involving multiple ships employing mid-frequency active sonar near land may produce sound directed towards a channel or embayment that may cut off the lines of egress for marine mammals (Freitas, 2004)

# E.1.6.2 Other Global Stranding Discussions

In the following sections, stranding events that have been linked to U.S. Navy activity in popular press are presented. As detailed in the individual case study conclusions, the U.S. Navy believes there is enough evidence available to refute allegations of impacts from mid-frequency sonar, or at least indicate a substantial degree of uncertainty in time and space that precludes a meaningful scientific conclusion.

# Case Studies of Stranding Events

# 2003 Washington State Harbor Porpoise Strandings (May 2 – June 2 2003)

<u>Description:</u> At 1040 hours on May 5, 2003, the USS SHOUP began the use of mid-frequency tactical active sonar as part of a naval exercise. At 1420, the USS SHOUP entered the Haro Strait and terminated active sonar use at 1438, thus limiting active sonar use within the strait to less than 20 minutes. Between May 2 and June 2, 2003, approximately 16 strandings involving 15 harbor porpoises (*Phocoena phocoena*) and one Dall's porpoise (*Phocoenoides dalli*) were reported to the Northwest Marine Mammal

Stranding Network. A comprehensive review of all strandings and the events involving USS SHOUP on May 5, 2003 were presented in U.S. Department of Navy (2004). Given that the USS SHOUP was known to have operated sonar in the strait on May 5, and that supposed behavioral reactions of killer whales (*Orcinus orca*) had been putatively linked to these sonar operations (NMFS Office of Protected Resources, 2005), NMFS undertook an analysis of whether sonar caused the strandings of the harbor porpoises.

Whole carcasses of ten harbor porpoises and the head of an additional porpoise were collected for analysis. Necropsies were performed on ten of the porpoises, and six whole carcasses and two heads were selected for CT imaging. Gross examination, histopathology, age determination, blubber analysis, and various other analyses were conducted on each of the carcasses (Norman et al., 2004).

<u>Findings</u>: Post-mortem findings and analysis details are found in Norman et al. (2004). All of the carcasses suffered from some degree of freeze-thaw artifact that hampered gross and histological evaluations. At the time of necropsy, three of the porpoises were moderately fresh; the remainder of the carcasses were considered to have moderate to advanced decomposition. None of the 11 harbor porpoises demonstrated signs of acoustic trauma. In contrast, a putative cause of death was determined for five of the porpoises; two animals had blunt trauma injuries and three had indication of disease processes (fibrous peritonitis, salmonellosis and necrotizing pneumonia). A cause of death could not be determined in the remaining animals, which is consistent with expected percentage of marine mammal necropsies conducted within the Northwest region. It is important to note, however, that these determinations were based only on the evidence from the necropsy to avoid bias with regard to determinations of the potential presence or absence of acoustic trauma. The result was that other potential causal factors, such as one animal (Specimen 33NWR05005) found tangled in a fishing net, was unknown to the investigators in their determination regarding the likely cause of death.

Conclusions: NMFS concluded from a retrospective analysis of stranding events that the number of harbor porpoise stranding events in the approximate month surrounding the USS SHOUP use of sonar was higher than expected based on annual strandings of harbor porpoises (Norman et al., 2004). In this regard, it is important to note that the number of strandings in the May-June timeframe in 2003 was also higher for the outer coast, indicating a much wider phenomena than use of sonar by USS SHOUP in Puget Sound for one day in May. The conclusion by NMFS that the number of strandings in 2003 was higher is also different from that of The Whale Museum, which has documented and responded to harbor porpoise strandings since 1980 (Osborne, 2003). According to The Whale Museum, the number of strandings as of May 15, 2003, was consistent with what was expected based on historical stranding records and was less than that occurring in certain years. For example, since 1992 the San Juan Stranding Network has documented an average of 5.8 porpoise strandings per year. In 1997 there were 12 strandings in the San Juan Islands with more than 30 strandings throughout the general Puget Sound area. Disregarding the discrepancy in the historical rate of porpoise strandings and its relation to the USS SHOUP, NMFS acknowledged that the intense level of media attention focused on the strandings likely resulted in an increased reporting effort by the public over that which is normally observed (Norman et al., 2004). NMFS also noted in its report that the "sample size is too small and biased to infer a specific relationship with respect to sonar usage and subsequent strandings."

Seven of the porpoises collected and analyzed died prior to SHOUP departing to sea on May 5, 2003. Of these seven, one, discovered on May 5, 2003, was in a state of moderate decomposition, indicating it died before May 5; the cause of death was determined, most likely, to be salmonella septicemia. Another porpoise, discovered at Port Angeles on May 6, 2003, was in a state of moderate decomposition, indicating that this porpoise also died prior to May 5. One stranded harbor porpoise discovered fresh on May 6 is the only animal that could potentially be linked in time to the USS SHOUP's May 5 active sonar use. Necropsy results for this porpoise found no evidence of acoustic trauma. The remaining eight strandings were discovered one to three weeks after the USS SHOUP's May 5 transit of the Haro Strait,

making it difficult to causally link the sonar activities of the USS SHOUP to the timing of the strandings. Two of the eight porpoises died from blunt trauma injury and a third suffered from parasitic infestation, which possibly contributed to its death (Norman et al., 2004). For the remaining five porpoises, NMFS was unable to identify the causes of death.

Additionally, it has become clear that the number of harbor porpoise strandings in the Northwest increased beginning in 2003 and through 2006. Figure A-3 shows the number of strandings documented in the Northwest for harbor porpoises. On November 3, 2006, a UME in the Pacific Northwest was declared. In 2006, a total of 66 harbor porpoise strandings were reported in the Outer Coast of Oregon and Washington and Inland waters of Washington (NOAA Fisheries, 2006; NOAA Fisheries, Northwest Region, 2006a).

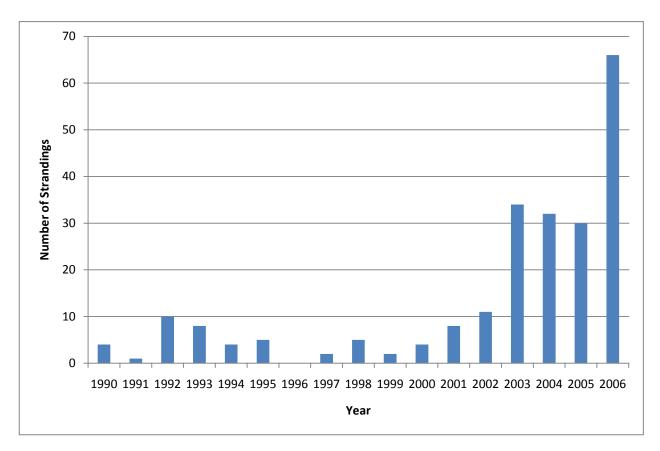


Figure E-4. Northwest Region Harbor Porpoise Strandings 1990 - 2006

Source: NOAA Fishereis, Northwest Region, 2006b

The speculative association of the harbor porpoise strandings to the use of sonar by the USS SHOUP is inconsistent with prior stranding events linked to the use of mid-frequency sonar. Specifically, in prior events, the stranding of whales occurred over a short period of time (less than 36 hours), stranded individuals were spatially co-located, traumas in stranded animals were consistent between events, and active sonar was known or suspected to be in use. Although mid-frequency active sonar was used by the USS SHOUP, the distribution of harbor porpoise strandings by location and with respect to time surrounding the event do not support the suggestion that mid-frequency active sonar was a cause of harbor porpoise strandings. Rather, a complete lack of evidence of any acoustic trauma within the harbor porpoises and the identification of probable causes of stranding or death in several animals further support the conclusion that harbor porpoise strandings were unrelated to the sonar activities of the USS SHOUP.

Additional allegations regarding USS SHOUP use of sonar having caused behavioral effects to Dall's porpoise, orca and a minke whale also arose in association with this event (see U.S. Department of Navy 2004 for a complete discussion).

Dall's porpoise: Information regarding the observation of Dall's porpoise on May 5, 2003, came from the operator of a whale watch boat at an unspecified location. This operator reported the Dall's porpoise were seen "going north" when the SHOUP was estimated by him to be 10 miles away. Potential reasons for the Dall's movement include the pursuit of prey, the presence of harassing resident orca or predatory transient orca, vessel disturbance from one of many whale watch vessels or multiple other unknowable reasons, including the use of sonar by SHOUP. In short, there was nothing unusual in the observed behavior of the Dall's porpoise on May 5, 2003 and no way to assess if the otherwise normal behavior was in reaction to the use of sonar by SHOUP, any other potential causal factor or a combination of factors.

Orca: Observer opinions regarding orca J-Pod behaviors on May 5, 2003, were inconsistent, ranging from the orca being "at ease with the sound" or "resting" to their being "annoyed." One witness reported observing "low rates of surface active behavior" on behalf of the orca J-Pod, which is in conflict with that of another observer who reported variable surface activity, tail slapping and spyhopping. Witnesses also expressed the opinion that the behaviors displayed by the orca on May 5, 2003, were "extremely unusual," although those same behaviors are observed and reported regularly on the Orca Network Website, are behaviors listed in general references as being part of the normal repertoire of orca behaviors. Given the contradictory nature of the reports on the observed behavior of the J-Pod orca, there is no way to assess if any unusual behaviors were present or if present they were in reaction to vessel disturbance from one of many nearby whale watch vessels, use of sonar by SHOUP, any other potential causal factor or a combination of factors.

Minke whale: A minke whale was reported porpoising in Haro Strait on May 5, 2003, which is a rarely observed behavior. The cause of this behavior is indeterminate given multiple potential causal factors including but not limited to the presence of predatory transient orca, possible interaction with whale watch boats, other vessel or SHOUP's use of sonar. Given the existing information, there is no way to be certain if the unusual behavior observed was in reaction to the use of sonar by SHOUP, any other potential causal factor or a combination of factors.

# 2004 Alaska Beaked Whale Strandings (Northern Edge Exercise, 7-16 June 2004)

<u>Description</u>: Between 27 June and 19 July 2004, five beaked whales were discovered at various locations along 1,600 miles of the Alaskan coastline and one was found floating (dead) at sea. These whales included three Baird's beaked whales and two Cuvier's beaked whales. Questions and comments posed on previous Navy environmental documents have alleged that sonar use may have been the cause of these strandings in association with the Navy Alaska Shield/Northern Edge exercise, which occurred June 7 to June 16, 2004 (within the approximate timeframe of these strandings).

<u>Findings</u>: Information regarding the strandings is incomplete as the whales had been dead for some time before they were discovered. The stranded beaked whales were in moderate to advanced states of decomposition and necropsies were not performed. Additionally, prior to the Navy conducting the Alaska Shield/Northern Edge exercise, two Cuvier's beaked whales were discovered stranded at two separate locations along the Alaskan coastline (February 26 at Yakutat and June 1 at Nuka Bay).

Zimmerman (1991) reported that between 1975 and 1987, 11 species of cetaceans were found stranded in Alaska seven or more times, including 29 Stejneger's beaked whales, 19 Cuvier's beaked whales, and 8 Baird's beaked whales. Cuvier's beaked whales have been found stranded from the eastern Gulf of Alaska to the western Aleutians. Baird's beaked whales were found stranded as far north as the area

between Cape Pierce and Cape Newenham, east near Kodiak, and along the Aleutian Islands. (Zimmerman, 1991). In short, however, the stranding of beaked whales in Alaska is a relatively uncommon occurrence (as compared to other species).

<u>Conclusions</u>: The at-sea portion of the Alaska Shield/Northern Edge 2004 exercise consisted mainly surface ships and aircraft tracking a vessel of interest followed by a vessel boarding search and seizure event. There was no ASW component to the exercise, no use of mid-frequency sonar and no use of explosives in the water. There were no events in the Alaska Shield/Northern Edge exercise that could have caused or been related to any of the strandings over this 33-day period along 1,600 miles of coastline.

# 2004 Hawai'i Melon-Headed Whale Unusual Milling Event (July 3-4 2004)

<u>Description</u>: The majority of the following information is taken from the NMFS report (which referred to the event as a "mass stranding event"; (Southall et al., 2006) but includes additional and new information not presented in the NMFS report. On the morning of July 3, 2004, between 150 and 200 melon-headed whales (*Peponocephala electra*) entered Hanalei Bay, Kauai. Individuals attending a canoe blessing ceremony observed the animals entering the bay at approximately 7:00 a.m. The whales were reported entering the bay in a "wave as if they were chasing fish" (Braun 2006). At 6:45 a.m. on July 3, 2004, approximately 25 nm north of Hanalei Bay, active sonar was tested briefly prior to the start of an antisubmarine warfare exercise.

The whales stopped in the southwest portion of the bay, grouping tightly, and displayed spy-hopping and tail-slapping behavior. As people went into the water among the whales, the pod separated into as many as four groups, with individual animals moving among the clusters. This continued through most of the day, with the animals slowly moving south and then southeast within the bay. By about 3 p.m., police arrived and kept people from interacting with the animals. The Navy believes that the abnormal behavior by the whales during this time is likely the result of people and boats in the water with the whales rather than the result of sonar activities taking place 25 or more miles off the coast. At 4:45 p.m. on July 3, 2004, the RIMPAC Battle Watch Captain received a call from a National Marine Fisheries representative in Honolulu, Hawaii, reporting the sighting of as many as 200 melon-headed whales in Hanalei Bay. At 4:47 p.m. the Battle Watch Captain directed all ships in the area to cease active sonar transmissions.

At 7:20 p.m. on July 3, 2004, the whales were observed in a tight single pod 75 yards from the southeast side of the bay. The pod was circling in a group and displayed frequent tail slapping and whistle vocalizations and some spyhopping. No predators were observed in the bay and no animals were reported having fresh injuries. The pod stayed in the bay through the night of July 3, 2004. On the morning of July 4, 2004, the whales were observed to still be in the bay and collected in a tight group. A decision was made at that time to attempt to herd the animals out of the bay. A 700-to-800-foot rope was constructed by weaving together beach morning glory vines. This vine rope was tied between two canoes and with the assistance of 30 to 40 kayaks, was used to herd the animals out of the bay. By approximately 11:30 a.m. on July 4, 2004, the pod was coaxed out of the bay.

A single neonate melon-headed whale was observed in the bay on the afternoon of July 4, after the whale pod had left the bay. The following morning on July 5, 2004, the neonate was found stranded on Lumahai Beach. It was pushed back into the water but was found stranded dead between 9 and 10 a.m. near the Hanalei pier. NMFS collected the carcass and had it shipped to California for necropsy, tissue collection and diagnostic imaging.

Following the unusual milling event, NMFS undertook an investigation of possible causative factors of the event. This analysis included available information on environmental factors, biological factors and an analysis of the potential for sonar involvement. The latter analysis included vessels that utilized mid-

frequency active sonar on the afternoon and evening of July 2. These vessels were to the southeast of Kauai, on the opposite side of the island from Hanalei Bay.

<u>Findings</u>: NMFS concluded from the acoustic analysis that the melon-headed whales would have had to have been on the southeast side of Kauai on July 2 to have been exposed to sonar from naval vessels on that day (Southall et al., 2006). There was no indication whether the animals were in that region or whether they were elsewhere on July 2. NMFS concluded that the animals would have had to swim from 1.4 to 4.0 m/s for 6.5 to 17.5 hours after sonar transmissions ceased to reach Hanalei Bay by 7 a.m. on July 3. Sound transmissions by ships to the north of Hanalei Bay on July 3 were produced as part of exercises between 6:45 a.m. and 4:47 p.m. Propagation analysis conducted by the 3rd Fleet estimated that the level of sound from these transmissions at the mouth of Hanalei Bay could have ranged from 138-149 dB re: 1 μPa.

NMFS was unable to determine any environmental factors (e.g., harmful algal blooms, weather conditions) that may have contributed to the stranding. However, additional analysis by Navy investigators found that a full moon occurred the evening before the stranding and was coupled with a squid run (Mobley, 2007). One of the first observations of the whales entering the bay reported the pod came into the bay in a line "as if chasing fish" (Braun, 2005). In addition, a group of 500 to 700 melonheaded whales were observed to come close to shore and interact with humans in Sasanhaya Bay, Rota, on the same morning as the whales entered Hanalei Bay (Jefferson et al., 2006). Previous records further indicated that, though the entrance of melon-headed whales into the shallows is rare, it is not unprecedented. A pod of melon-headed whales entered Hilo Bay in the 1870s in a manner similar to that which occurred at Hanalei Bay in 2004.

The necropsy of the melon-headed whale calf suggested that the animal died from a lack of nutrition, possibly following separation from its mother. The calf was estimated to be approximately one week old. Although the calf appeared not to have eaten for some time, it was not possible to determine whether the calf had ever nursed after it was born. The calf showed no signs of blunt trauma or viral disease and had no indications of acoustic injury.

<u>Conclusions</u>: Although it is not impossible, it is unlikely that the sound level from the sonar caused the melon-headed whales to enter Hanalei Bay. This conclusion is based on a number of factors:

- 1. The speculation that the whales may have been exposed to sonar the day before and then fled to the Hanalei Bay is not supported by reasonable expectation of animal behavior and swim speeds. The flight response of the animals would have had to persist for many hours following the cessation of sonar transmissions. Such responses have not been observed in marine mammals and no documentation exists that such persistent flight response after the cessation of a frightening stimulus has been observed in other mammals. The swim speeds, though feasible for the species, are highly unlikely to be maintained for the durations proposed, particularly since the pod was a mixed group containing both adults and neonates. Whereas adults may maintain a swim speed of 4.0 m/s for some time, it is improbable that a neonate could achieve the same for a period of many hours.
- 2. The area between the islands of Oahu and Kauai and the Pacific Missile Range Facility training range have been used in RIMPAC exercises for more than 30 years, and are used year-round for ASW training with mid-frequency active sonar. Melon-headed whales inhabiting the waters around Kauai are likely not naive to the sound of sonar and there has never been another stranding event associated in time with ASW training at Kauai. Similarly, the waters surrounding Hawaii contain an abundance of marine mammals, many of which would have been exposed to the same sonar operations that were speculated to have affected the melon-headed whales. No other strandings were reported coincident with the RIMPAC exercises. This leaves it uncertain as to why melon-headed whales, and no other species of marine mammal, would respond to the sonar exposure by stranding.

- 3. At the nominal swim speed for melon-headed whales, the whales had to be within 1.5 to 2 nm of Hanalei Bay before sonar was activated on July 3. The whales were not in their open ocean habitat but had to be close to shore at 6:45 a.m. when the sonar was activated to have been observed inside Hanalei Bay from the beach by 7 a.m (Hanalei Bay is very large area). This observation suggests that other potential factors could have caused the event (see below).
- 4. The simultaneous movement of 500 to 700 melon-headed whales and Risso's dolphins into Sasanhaya Bay, Rota, in the Northern Marianas Islands on the same morning as the 2004 Hanalei stranding (Jefferson et al., 2006) suggests that there may be a common factor which prompted the melon-headed whales to approach the shoreline. A full moon occurred the evening before the stranding and a run of squid was reported concomitant with the lunar activity (Mobley et al., 2007). Thus, it is possible that the melon-headed whales were capitalizing on a lunar event that provided an opportunity for relatively easy prey capture (Mobley et al., 2007). A report of a pod entering Hilo Bay in the 1870s indicates that on at least one other occasion, melon-headed whales entered a bay in a manner similar to the occurrence at Hanalei Bay in July 2004. Thus, although melon-headed whales entering shallow embayments may be an infrequent event, and every such event might be considered anomalous, there is precedent for the occurrence.
- 5. The received noise sound levels at the bay were estimated to range from roughly 95 to 149 dB re: 1  $\mu$ Pa. Received levels as a function of time of day have not been reported, so it is not possible to determine when the presumed highest levels would have occurred and for how long. However, received levels in the upper range would have been audible by human participants in the bay. The statement by one interviewee that he heard "pings" that lasted an hour and that they were loud enough to hurt his ears is unreliable. Received levels necessary to cause pain over the duration stated would have been observed by most individuals in the water with the animals. No other such reports were obtained from people interacting with the animals in the water.

Although NMFS concluded that sonar use was a "plausible, if not likely, contributing factor in what may have been a confluence of events (Southall et al., 2006)," this conclusion was based primarily on the basis that there was an absence of any other compelling explanation. The authors of the NMFS report on the incident were unaware, at the time of publication, of the simultaneous event in Rota. In light of the simultaneous Rota event, the Hanalei event does not appear as anomalous as initially presented and the speculation that sonar was a causative factor is weakened. The Hanalei Bay incident does not share the characteristics observed with other mass strandings of whales coincident with sonar activity (e.g., specific traumas, species composition, etc.). In addition, the inability to conclusively link or exclude the impact of other environmental factors makes a causal link between sonar and the melon-headed whale event highly speculative at best.

# 1980- 2004 Beaked Whale Strandings in Japan (Brownell et al., 2004)

<u>Description</u>: Brownell et al. (2004) compared the historical occurrence of beaked whale strandings in Japan (where there are U.S. Navy bases), with strandings in New Zealand (which lacks a U.S. Naval base) and concluded the higher number of strandings in Japan may be related to the presence of US. Navy vessels using mid-frequency sonar. While the dates for the strandings were well-documented, the authors of the study did not attempt to correlate the dates of any navy activities or exercises with those stranding dates.

To fully investigate the allegation made by Brownell et al. (2004), the Center for Naval Analysis (CNA) in an internal Navy report, looked at past U.S. Naval exercise schedules from 1980 to 2004 for the water around Japan in comparison to the dates for the strandings provided by Brownell et al. (2004). None of the strandings occurred during or soon (within weeks) after any U.S. Navy exercises. While the CNA analysis began by investigating the probabilistic nature of any co-occurrences, the strandings and sonar

use were not correlated by time. Given that there was no instance of co-occurrence in over 20 years of stranding data, it can be reasonably postulated that sonar use in Japan waters by U.S. Navy vessels did not lead to any of the strandings documented by Brownell et al. (2004).

# 2005 North Carolina Marine Mammal Mass Stranding Event (January 15-16, 2005)

<u>Description</u>: On January 15 and 16, 2005, 36 marine mammals consisting of 33 short-finned pilot whales, one minke whale, and two dwarf sperm whales stranded alive on the beaches of North Carolina (Hohn et al., 2006a). The animals were scattered across a 111-km area from Cape Hatteras northward. Because of the live stranding of multiple species, the event was classified as a UME. It is the only stranding on record for the region in which multiple offshore species were observed to strand within a two- to three-day period

The U.S. Navy indicated that from January 12-14 some unit level training with mid-frequency active sonar was conducted by vessels that were 93 to 185 km from Oregon Inlet. An expeditionary strike group was also conducting exercises to the southeast, but the closest point of active sonar transmission to the inlet was 650 km away. The unit-level operations were not unusual for the area or time of year and the vessels were not involved in antisubmarine warfare exercises. Marine mammal observers on board the vessels did not detect any marine mammals during the period of unit-level training. No sonar transmissions were made on January 15-16.

The National Weather Service reported that a severe weather event moved through North Carolina on January 13 and 14. The event was caused by an intense cold front that moved into an unusually warm and moist air mass that had been persisting across the eastern United States for about a week. The weather caused flooding in the western part of the state, considerable wind damage in central regions of the state, and at least three tornadoes that were reported in the north central part of the state. Severe, sustained (one to four days) winter storms are common for this region.

Over a two-day period (January 16-17), two dwarf sperm whales, 27 pilot whales and the minke whale were necropsied and tissue samples collected. Twenty-five of the stranded cetacean heads were examined; two pilot whale heads and the heads of the dwarf sperm whales were analyzed by CT.

<u>Findings</u>: The pilot whales and dwarf sperm whale were not emaciated, but the minke whale, which was believed to be a dependent calf, was emaciated. Many of the animals were on the beach for an extended period of time prior to necropsy and sampling, and many of the biochemical abnormalities noted in the animals were suspected of being related to the stranding and prolonged time on land. Lesions were observed in all of the organs, but there was no consistency across species. Musculoskeletal disease was observed in two pilot whales and cardiovascular disease was observed in one dwarf sperm whale and one pilot whale. Parasites were a common finding in the pilot whales and dwarf sperm whales but were considered consistent with the expected parasite load for wild odontocetes. None of the animals exhibited traumas similar to those observed in prior stranding events associated with mid-frequency sonar activity. Specifically, there was an absence of auditory system trauma and no evidence of distributed and widespread bubble lesions or fat emboli, as was previously observed (Fernández et al., 2005).

Sonar transmissions prior to the strandings were limited in nature and did not share the concentration identified in previous events associated with mid-frequency active sonar use (Evans and England, 2001). The operational/environmental conditions were also dissimilar (e.g., no constrictive channel and a limited number of ships and sonar transmissions). NMFS noted that environmental conditions were favorable for a shift from up-welling to down-welling conditions, which could have contributed to the event. However, other severe storm conditions existed in the days surrounding the strandings and the impact of these weather conditions on at-sea conditions is unknown. No harmful algal blooms were noted along the coastline.

<u>Conclusions</u>: All of the species involved in this stranding event are known to occasionally strand in this region. Although the cause of the stranding could not be determined, several whales had preexisting conditions that could have contributed to the stranding. Cause of death for many of the whales was likely due to the physiological stresses associated with being stranded. A consistent suite of injuries across species, which was consistent with prior strandings where sonar exposure is expected to be a causative mechanism, was not observed.

NMFS was unable to determine any causative role that sonar may have played in the stranding event. The acoustic modeling performed, as in the Hanalei Bay incident, was hampered by uncertainty regarding the location of the animals at the time of sonar transmissions. However, as in the Hanalei Bay incident, the response of the animals following the cessation of transmissions would imply a flight response that persisted for many hours after the sound source was no longer operational. In contrast, the presence of a severe weather event passing through North Carolina during January 13 and 14 is a possible, if not likely, contributing factor to the North Carolina UME of January 15. Hurricanes may have been responsible for mass strandings of pygmy killer whales in the British Virgin Islands and Gervais' beaked whales in North Carolina (Mignucci-Giannoni et al., 2000; Norman and Mead, 2001).

# E.1.6.3 Causal Associations for Stranding Events

Several stranding events have been associated with Navy sonar activities but relatively few of the total stranding events that have been recorded occurred spatially or temporally with Navy sonar activities. While sonar may be a contributing factor under certain rare conditions, the presence of sonar it is not a necessary condition for stranding events to occur. In established range areas such as those in Hawaii and Southern California where sonar use has been routine for decades, there is no evidence of impacts from sonar use on marine mammals.

A review of past stranding events associated with sonar suggests that the potential factors that may contribute to a stranding event are steep bathymetry changes, narrow channels, multiple sonar ships, surface ducting and the presence of beaked whales that may be more susceptible to sonar exposures. The most important factors appear to be the presence of a narrow channel (e.g. Bahamas and Madeira Island, Portugal) that may prevent animals from avoiding sonar exposure and multiple sonar ships within that channel. There are no narrow channels (less than 35 nm wide and 10 nm in length) in the SOCAL Range Complex and the ships would be spread out over a wider area allowing animals to move away from sonar activities if they choose. In addition, beaked whales may not be more susceptible to sonar but may favor habitats that are more conducive to sonar effects.

# **E.1.7 Stranding Section Conclusions**

Marine mammal strandings have been a historic and ongoing occurrence attributed to a variety of causes. Over the last 50 years, increased awareness and reporting has lead to more information about species effected and raised concerns about anthropogenic sources of stranding. While there have been some marine mammal mortalities potentially associated with mid-frequency sonar effects to a small number of species (primarily limited numbers of certain species of beaked whales), the significance and actual causative reason for any impacts is still subject to continued investigation.

By comparison and as described previously, potential impacts to all species of cetaceans worldwide from fishery related mortality can be orders of magnitude more significant (100,000s of animals versus tens of animals) (Culik, 2002; ICES, 2005b; Read et al., 2006). This does not negate the influence of any mortality or additional stressor to small, regionalized sub-populations which may be at greater risk from human related mortalities (fishing, vessel strike, sound) than populations with larger oceanic level distribution or migrations. ICES (2005a) noted, however, that taken in context of marine mammal populations in general, sonar is not a major threat, nor is it a significant portion of the overall ocean noise budget.

In conclusion, a constructive framework and continued research based on sound scientific principles is needed in order to avoid speculation as to stranding causes, and to further our understanding of potential effects or lack of effects from military mid-frequency sonar (Bradshaw et al., 2005; ICES 2005b; Barlow and Gisiner, 2006; Cox et al., 2006).

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# Appendix F

**Public Participation** 

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# F Public Participation

This appendix includes information about the public's participation in the development of the Northwest Training Range Complex (NWTRC) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). The first part of this appendix summarizes the public scoping process that began with the publication of the Notice of Intent (NOI) in the *Federal Register* in July 2007. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS, and included 5 public scoping meetings.

The second part of this appendix addresses the public's involvement in reviewing and commenting on the Draft EIS/OEIS. This section includes a summary of the Navy's public involvement efforts, including information about public hearings, media advertisements and notifications, letters to stakeholders, and meeting flyers. As part of this phase of public involvement, the Navy received comments to the Draft EIS/OEIS from individuals, agencies, elected officials, organizations, and tribes. These comments, and the Navy's response to them are addressed in Appendix G.

# F.1 PROJECT WEBSITE

A public website was established specifically for this project, http://www.nwtrangecomplexeis.com/. This website address was published in the initial Notice of Intent and has subsequently been re-printed in all newspaper advertisements, agency letters, and public postcards for both the Notice of Intent to Prepare an Environment Impact Statement and Notice of Availability of the Draft Environmental Impact Statement. The Draft EIS/OEIS, Scoping Meeting Fact Sheets, and various other materials have been available on the project website throughout the course of the project.

# F.2 PUBLIC SCOPING

The public involvement process began with the issuance of the Notice of Intent to Prepare an Environmental Impact Statement in the *Federal Register* on July 31, 2007. This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on September 29, 2007. Section F.2.2 describes the Navy's notification efforts during scoping.

Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. The scoping meetings were held in an open house format, presenting informational posters and written information and making Navy staff and project experts available to answer participants' questions. Additionally, a tape recorder was available to record participants' oral comments. The interaction during the information sessions was productive and helpful to the Navy.

Scoping participants could submit comments in five ways:

- Oral statements at the public meetings (as recorded by the tape recorder);
- Written comments at the public meetings;
- Written letters (received any time during the public comment period);
- Electronic mail (received any time during the public comment period); and
- Comments submitted directly on the project website (received any time during the public comment period).

# F.2.1 Public Scoping Comments

In total, the Navy received comments from 50 individuals and groups. Because many of the comments addressed more than one issue, 191 total comments resulted. This summary provides an overview of comments received through these means during the scoping period. Comments are organized by issue area.

# F.2.1.1 Air Quality

Comments in this category expressed concern about the effects of military activities on air quality, including off-shore emissions that may be transmitted ashore by onshore winds. The EIS/OEIS should discuss which areas are in nonattainment of National Ambient Air Quality Standards.

# F.2.1.2 Alternatives

Most comments regarding alternatives suggested that the Navy consider other sites to conduct its activities. Several comments expressed concern over potential impacts to the Olympic Coast National Marine Sanctuary (OCNMS).

# F.2.1.3 Biological Resources – Marine Mammals, Fish and Marine Habitat

A significant number of comments received expressed concerns about impacts to marine life. Many of these comments specifically related to concerns about the effect of Navy sonar on marine life, such as marine mammals, fish, sea turtles, and sea invertebrates. Participants frequently requested that the EIS/OEIS consider alternative technologies to mid-frequency active (MFA) sonar. Several comments addressed protective and mitigation measures for marine mammals when sonar is used. Other comments identified specific policies that must be considered in the Navy's analysis, such as the Marine Mammal Protection Act.

# F.2.1.4 Biological Resources—Onshore

Several comments addressed the protection of birds, including shorebirds, seabirds, and migratory birds. Potential stressors to birds mentioned in the comments included bird strikes and noise disturbance. Among other terrestrial issues mentioned were concerns about habitat fragmentation and potential damage to intertidal, inland, or upland resources.

# F.2.1.5 Cultural Resources

Participants commenting on cultural resources were primarily concerned with impacts to tribal access, and recreational and subsistence fishing. A few comments also addressed the issue of potential damage to historically or culturally significant sites.

# F.2.1.6 Cumulative Impacts

Comments in this category expressed concern about the overall impact of past and present military activity in the Pacific Northwest and requested that the Navy initiate cleanup activities. Specific mention was made of the cumulative nature of activities at Naval Magazine Indian Island and the Naval Undersea Warfare Center Keyport Range. Additional comments requested that the Navy study the impacts of other actions, such as placement of wave electrical generation equipment, wind generators on Bear Ridge, and activities at Coast Guard Station Humboldt Bay and Eureka/Arcata airport.

# F.2.1.7 Environmental Justice

Commenters requested that the EIS/OEIS identify any disproportionate impacts to disempowered groups of people.

#### F.2.1.8 Hazardous Materials

Of the comments regarding hazardous materials, the primary concern was the effects of depleted uranium use on the environment in general.

# F.2.1.9 Health and Safety

One comment expressed concern about safety implications to commercial and recreational divers from MFA sonar. Another commenter was concerned about potential increases in aviation mishaps with increased unmanned aerial system use.

#### F.2.1.10 Noise

Several commenters expressed concern about any increase in airborne noise that could result from increased aircraft activity or offshore gun or bomb training.

# F.2.1.11 Miscellaneous

Comments were received that requested that the EIS/OEIS consider the protection of surfing waves and for analysis of impact to research activities.

# F.2.1.12 Mitigation Measures

Most comments regarding mitigation measures focused on marine mammals. For example, it was requested that the Navy employ better protective measures in future sonar exercises, such as conducting more monitoring and enforcing larger safety zones around ships. Several comments mentioned special mitigation measures in and around the OCNMS.

# F.2.1.13 Policy/National Environmental Policy Act Process

Comments on the National Environmental Policy Act (NEPA) process included several that felt the information available during scoping was not adequate enough to generate comments. One commenter requested that the scoping period be extended beyond 60 days and that another scoping meeting be held in Seattle.

### F.2.1.14 Recreation

One comment expressed concern about closing navigable waters for military activities. Such closures would negatively impact recreational fishing, boating and diving.

# F.2.1.15 Socioeconomics

Several comments regarding socioeconomic concerns included questions about the effects on commercial shipping, commercial diving and commercial fishing.

# F.2.1.16 Sonar and Underwater Detonations

Many comments mentioned concerns about the effect of Navy sonar on marine life, such as marine mammals, fish, sea turtles, and sea invertebrates. Participants frequently requested that the EIS/OEIS consider alternative technologies to MFA sonar. Several comments addressed protective and mitigation measures for marine mammals when sonar is used. Three comments specifically mentioned concerns about underwater detonations and their potential impact to the marine environment.

### F.2.1.17 Water Resources

Comments regarding water resources included general concerns about the potential for water quality to be affected by military activities.

# F.2.1.18 Summary of Comments

Table F-1 provides a breakdown of areas of concern based on comments received during scoping.

Table F-1: Public Scoping Comment Summary

Resource Area	Count	Percent of Total
Biological Resources - Marine Mammals	23	12.04%
Biological Resources - Fish & Marine Habitat	17	8.90%
Sonar Underwater Detonations	16	8.38%
Policy/NEPA	14	7.33%
Olympic Coast National Marine Sanctuary	12	6.28%
Other Navy EIS Studies and Unrelated Activities	12	6.28%
Water Resources	11	5.76%
Recreation	9	4.71%
Socioeconomics	9	4.71%
Cultural Resources	8	4.19%
Cumulative Impacts	7	3.66%
Health and Safety	7	3.66%
Threatened and Endangered Species	7	3.66%
Biological Resources - Onshore	6	3.14%
Mitigation	6	3.14%
Proposed Action	6	3.14%
Alternatives	5	2.62%
Noise	5	2.62%
Hazardous Materials / Hazardous Waste	4	2.09%
Miscellaneous	4	2.09%
Air Quality	2	1.05%
Environmental Justice	1	0.52%
TOTAL	191	

# F.2.2 Public Scoping Notification

The Navy made significant efforts at notifying the public to ensure maximum public participation during the scoping process. A summary of these efforts follows.

# F.2.2.1 Federal Register Notice

A Notice of Intent and Notice of Public Scoping Meetings was published in the *Federal Register* on July 31, 2007.

# F.2.2.2 Newspaper Display Advertisements

Advertisements were made to announce the scoping meetings in the following newspapers on the dates indicated below:

# Washington

Seattle Times

Thursday, August 2, 2007 Saturday, September 8, 2007 Sunday, September 9, 2007 Monday, September 10, 2007

Whidbey News-Times Saturday, August 4, 2007 Wednesday, September 5, 2007 Saturday, September 8, 2007

Peninsula Daily (both Port Townsend and Port Angeles editions)

Thursday, August 2, 2007 Saturday, September 8, 2007 Sunday, September 9, 2007 Monday, September 10, 2007 Daily World

Thursday, August 2, 2007 Sunday, September 9, 2007 Monday, September 10, 2007 Tuesday, September 11, 2007 Wednesday, September 12, 2007

#### Oregon

The News Guard

Wednesday, August 8, 2007 Wednesday, September 15, 2007 Wednesday, September 12, 2007

# California

Times-Standard
Thursday Augus

Thursday, August 2, 2007 Thursday, September 13, 2007 Friday, September 14, 2007 Saturday, September 15, 2007

# F.2.2.3 Scoping Notification Letters

*Notice of Intent/Notice of Scoping Meeting Letters* were distributed on July 31, 2007 and included the notice of intent to prepare EIS/OEIS and notification of scoping meetings. Recipients included:

# **Tribes and Nations**

# Washington:

- Hoh Indian Nation
- Jamestown S'Klallam Tribe
- Lower Elwha Klallam Tribe
- Lummi Nation
- Makah Tribe
- Northwest Indian Fisheries Commission
- Point No Point Treaty Council
- Port Gamble S'Klallam Tribe
- Quileute Tribal Council
- Quinalt Indian Nation
- Samish Indian Nation
- Sauk Suiattle Tribe
- Shoalwater Bay Tribe
- Skagit River Cooperative
- Skokomish Tribal Nation
- Snoqualmie Indian Tribe
- Stillaguamish Tribe
- Suquamish Tribal Center

- Swinomish Indian Tribal Community
- Tulalip Tribes of Washington
- Upper Skagit Tribe

# Oregon:

- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians
- Confederated Tribes of Grande Ronde
- Confederated Tribes of Siletz Indians
- Confederated Tribes of the Warm Springs Reservation
- Coquille Indian
- Cow Creek Band of Umpqua Tribe of Indians
- Klamath Tribes (Klamath, Modoc, Yahooskin)

#### California:

- Tolowa Nation
- Trinidad Rancheria
- Yurok Indian Reservation

# **Elected Officials**

# Washington:

- U.S. Representative, Washington District 1
- U.S. Representative, Washington District 2
- U.S. Representative, Washington District 3
- U.S. Representative, Washington District 5
- U.S. Representative, Washington District 6
- U.S. Representative, Washington District 7
  U.S. Representative, Washington District 8
- U.S. Representative, Washington District 9
- U.S. Senator, Washington
- U.S. Senator, Washington
- Office of the Governor
- Representative, Position 2, Washington District 7
- State Senator, Washington District 7
- Representative, Position 1, Washington District 7
- Representative, Position 2, Washington District 10
- State Senator, Washington District 10
- State Senator, Washington District 10
- Representative, Position 1, Washington District 10
- Representative, Position 2, Washington District 19
- State Senator, Washington District 19
- Representative, Position 1, Washington District 19
- State Senator, Washington District 24
- State Senator, Washington District 24
- Representative, Position 2, Washington District 24
- Representative, Position 1, Washington District 24
- Board of Island County Commissioners
- Clallam County Board of Commissioners
- County of Grays Harbor

- Ferry County Commissioners
- Grays Harbor County Board of Commissioners
- Jefferson County Board of Commissioners
- Kitsap County Board of Commissioners' Office
- Okanogan County Commissioners' Office
- Pacific County Board of Commissioners' Office
- Pend Oreille County Commissioners' Office

# Oregon:

- U.S. Representative, Oregon District 2
- U.S. Representative, Oregon District 4
- U.S. Representative, Oregon District 5
- U.S. Senator, Oregon
- U.S. Senator, Oregon
- Office of the Governor
- State Representative, Oregon District 1
- State Representative, Oregon District 9
- State Representative, Oregon District 57
- State Senator, Oregon District 1
- State Senator, Oregon District 5
- State Senator, Oregon District 29

# California:

- U.S. Representative, California District 1
- U.S. Senator, California
- U.S. Senator, California
- Office of the Governor
- State Representative, California Assembly District 1
- State Senator, California District 2
- State Senator, California District 4

# **Federal Regulatory and Government Agencies**

- Federal Aviation Administration
  - Washington D.C. headquarters
  - Western Pacific Region Military Liaison
- Marine Mammal Commission
- National Marine Fisheries Service
  - Washington D. C. headquarters
  - Northwest Regional Office
  - Office of Protected Resources
- Olympic Coast National Marine Sanctuary and Advisory Council
- Pacific Fisheries Management Council
- U.S. Army Corps of Engineers, Northwestern Division
- U.S. Army National Guard (Boardman, OR)
- U.S. Coast Guard
  - Headquarters NEPA Office
  - District 13
- U.S. Department of the Interior
  - Bureau of Indian Affairs

- Bureau of Land Management
- Environmental Policy & Compliance Department
- Minerals Management Service
- National Park Service, Olympic National Park
- U.S. Fish & Wildlife Service, Pacific Region Portland Office
- U.S. Geological Survey, Western Region
- U.S. Environmental Protection Agency
  - Washington D.C. headquarters
  - Region X
- U.S. Forest Service, Pacific Northwest Region

# **State Regulatory and Government Agencies**

# Washington:

- Pacific States Marine Fisheries Commission
- Puget Sound Partnership
- WA State Department of Agriculture
- WA State Department of Archaeology & Historic Preservation (SHPO)
- WA State Department of Ecology, Environmental Review Section
- WA State Department of Fish and Wildlife, Region 6
- WA Fish and Wildlife Commission
- WA State Department of Natural Resources
- WA State Ocean Policy Work Group
- WA State Parks and Recreation Commission

# Oregon:

- OR Department of Environmental Quality
- OR Department of Fish and Wildlife
- OR Department of Forestry
- OR Department of Land Conservation and Development
- OR Department of Parks and Recreation
- OR Department of State Lands
- OR Military Department
- OR Water Resources Department
- Pacific States Marine Fisheries Commission

# California:

- California Coastal Commission
- California Department of Fish and Game
- California Environmental Protection Agency
- California Resources Agency

# F.3 PUBLIC REVIEW OF THE DRAFT EIS/OEIS

On December 29, 2008, the Navy published a Notice of Availability of a Draft Environmental Impact Statement/Overseas Environmental Impact Statement in the *Federal Register*. This notice announced the availability of the Draft EIS/OEIS for public review. In addition to availability for viewing and downloading on the project website, CD copies and hardcopy sets were delivered to stakeholders as described in Section F.3.3.5. A news release was also issued and two media briefings were conducted to inform the public of the impending Notice publication. The Notice of Availability was the start of the public comment period for the Draft EIS/OEIS. The public comment period ended on April 13, 2009.

# F.3.1 Public Hearings

During the public comment period the Navy held public hearings to present information from the EIS/OEIS and to solicit public comments. Because the Navy's proposed activities would continue to be concentrated in or off the coast of Washington, three of the five scheduled hearings were held in Washington. Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon.

Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; and February 26, 2009-Tillamook, OR. Staffed poster stations with detailed information about the project and the Draft EIS/OEIS results were open for each meeting from 5:00 to 7:00 PM. During this time, Navy experts were available to answer questions and receive comments from members of the public. At 7 PM during each meeting a more formal, structured public hearing began in which the Navy presented a briefing on the Draft EIS/OEIS and the study conclusions. Following that presentation individuals provided oral comments. All oral comments were captured by a court reporter and have been reproduced later in this appendix. In addition to oral comments, the Navy received written comments during these hearings.

# F.3.2 Project Website

The Navy provided a public website that has been active since the NOI was published in July 2007. On the day of the public release of the Draft EIS/OEIS, this website made available an electronic (PDF) version of the Draft EIS/OEIS for download and review. A comment form could be downloaded from the website to allow the public to submit written comments. The website also provided a paperless capability for members of the public to enter a comment directly.

#### F.3.3 Public Notification

The Navy made significant efforts at notifying the public to ensure maximum public participation during the scoping process. A summary of these efforts follows.

# F.3.3.1 Federal Register Notice

A Notice of Availability was published in the *Federal Register* was on December 29, 2008. A Notice of Public Hearings was published the next day, December 30, 2008, also in the *Federal Register*. The Notice of Public Hearings announced a 45-day comment period scheduled to end on February 11, 2009. Following public requests that the comment period be extended, the Navy agreed and extended the period three times, ultimately providing a 105-day comment period that ended on April 13, 2009. The three extensions were published in the *Federal Register* on February 11, February 25, and March 18, 2009.

# F.3.3.2 Newspaper Display Advertisements

Advertisements were made to announce the availability of the Draft EIS/OEIS and to announce the schedule and locations for public hearings as follows:

Washington

Seattle Times

Tuesday, December 30, 2008 Thursday, January 15, 2009 Friday, January 23, 2009 Monday, January 26, 2009 Tuesday, January 27, 2009

Whidbey News-Times

Wednesday, December 31, 2009 Saturday, January 17, 2009 Saturday, January 24, 2009

Peninsula Daily (both Port Townsend and Port

Angeles editions)

Tuesday, December 30, 2008 Thursday, January 15, 2009 Friday, January 23, 2009 Monday, January 26, 2009 Tuesday, January 27, 2009 Daily World

Tuesday, December 30, 2008 Friday, January 16, 2009 Monday, January 26, 2009 Tuesday, January 27, 2009 Wednesday, January 28, 2009 Thursday, January 29, 2009

Oregon

Newport News-Times

Wednesday, December 31, 2009 Friday, January 16, 2009 Wednesday, January 21, 2009

Friday, January 23, 2009 Wednesday, January 28, 2009

California

Times-Standard

Tuesday, December 30, 2008 Thursday, January 22, 2009 Friday, January 30, 2009 Saturday, January 31, 2009 Monday, February 2, 2009

# F.3.3.3 News Releases

News releases were disseminated on Dec 29, Jan 11 and Jan 23. The following national and State media outlets received the news releases:

National

**Associated Press** 

Washington

Seattle Post-Intelligencer

Seattle Times

Whidbey News-Times
Peninsula Daily News
North Kitsap Herald
Port Townsend Leader
South Whidbey Record
The News-Tribune

San Juan Journal The Daily Herald

Puget Sound Business Journal

Kitsap Peninsula Business Journal

Seattle Press On Line

KING 5 TV KIRO TV KOMO 4 TV KCPO Q13 Fox TV

Northwest Cable News

Oregon

Newport News-Times

California

North Coast Journal Times-Standard

# F.3.3.4 Meeting Flyers

Public hearing flyers were distributed to advertise the public meetings to local community centers and/or areas frequented by the public.

Oak Harbor, Washington
Oak Harbor Senior Center
Boys and Girls Club of Oak Harbor
U.S. Post Office
Oak Harbor Library

Pacific Beach, Washington
U.S. Post Office
North Beach Business Association (NBBA)

Grays Harbor, Washington
Grays Harbor Chamber of Commerce
Aberdeen Timberland Library
The Salvation Army Corps Community Center,
Aberdeen
U.S. Post Office Aberdeen

Newport, Oregon Newport Chamber of Commerce U.S. Post Office, Newport Newport Public Library Oregon Coast History Center

Eureka, California
U.S. Post Office, Eureka (Walnut Drive)
Humboldt County Library
Trinidad Branch Library
Adorni Recreation Center
Salvation Army Corps Community Center (sent back returned mail)

# F.3.3.5 Stakeholder Letters

DEIS Distribution/Public Hearings Letters were distributed Dec 29 and included the notification of public hearings and notice of availability of Draft EIS/OEIS (CD or hard copy of EIS included).

Following is a list of public officials, government agencies, Native American Tribes and Nations, organizations, and individuals who attended the public scoping meetings, provided comments during the scoping process, or have been identified by the Navy to be on the distribution list for the Northwest Training Range Complex Draft Environmental Impact Statement (DEIS).

Federal and state regulatory agencies and project information repositories (noted below with an asterisk\*) received both one (1) hard copy version and one (1) CD-ROM version of the Northwest Training Range Complex Draft EIS/OEIS. Stakeholders who specifically requested a hard copy version also received one, along with a CD-ROM version. All other stakeholders received one (1) CD-ROM version. Additional hard copies and/or CD-ROM versions of the Draft EIS/OEIS were made available when requested.

# Information Repositories\*

Jefferson County Rural Library Kitsap Regional Library Oak Harbor Public Library

Timberland Regional Library
Port Townsend Public Library

Lincoln City Public Library

Lincoln City Public Library

Humboldt County Library

Tillamook County Library Newport Public Library

Suislaw Public Library

Federal Regulatory Agencies\*

Federal Aviation Administration

- Washington D.C. headquarters
- Western Pacific Region Military Liaison

Marine Mammal Commission

National Marine Fisheries Service

- Washington D.C. headquarters
- Northwest Regional Office
- Office of Protected Resources

Olympic Coast National Marine Sanctuary

Pacific Fisheries Management Council

U.S. Army Corps of Engineers

- Northwestern Division

U.S. Army National Guard (Boardman, OR)

U.S. Coast Guard

- Headquarters NEPA Office
- District 13

U.S. Department of the Interior

- Bureau of Indian Affairs
- Bureau of Land Management
- Environmental Policy & Compliance Department
- Minerals Management Service
- National Park Service, Olympic National Park

- U.S. Fish & Wildlife
 Service, Pacific Region –
 Portland Office

- U.S. Geological Survey, Western Region

U.S. Environmental Protection Agency

- Washington D.C. headquarters

- Region X

U.S. Forest Service

- Pacific Northwest Region

### State Regulatory Agencies\*

WA State Department of Agriculture

WA State Department of Archaeology & Historic Preservation (SHPO)

WA State Department of Ecology, Environmental Review Section

WA State Department of Fish and Wildlife, Region 6

WA Fish and Wildlife Commission

WA State Department of Natural Resources

WA State Ocean Policy Work Group

WA State Parks and Recreation Commission

Pacific States Marine Fisheries Commission

Puget Sound Partnership

OR Department of Environmental Quality

OR Department of Fish and Wildlife

OR Department of Forestry

OR Department of Land Conservation and Development

OR Department of Parks and Recreation

OR Department of State Lands

**OR Military Department** 

OR Water Resources Department

**CA Coastal Commission** 

- Headquarters

- North Coast District

CA Department of Fish and Game

CA Environmental Protection Agency

CA Resources Agency

# Native American Tribes and Nations\*

Washington

Hoh Indian Nation

Jamestown S'Klallam Tribe

Lower Elwha Klallam Tribe

Lummi Nation

Makah Tribe

Northwest Indian Fisheries

Commission

Point No Point Treaty Council

Port Gamble S'Klallam Tribe

Quileute Tribal Council

Quinalt Indian Nation

Samish Indian Nation

Sauk – Suiattle Tribe

Shoalwater Bay Tribe

Skagit River Cooperative

Skokomish Tribal Nation

Snoqualmie Indian Tribe

Stillaguamish Tribe

Suquamish Tribal Center

Swinomish Indian Tribal

Community

Tulalip Tribes of Washington

Upper Skagit Tribe

Oregon

Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians

Confederated Tribes of Grande Ronde

Confederated Tribes of Siletz Indians

Confederated Tribes of the Warm Springs Reservation

Coquille Indian

Cow Creek Band of Umpqua Tribe of Indians

Klamath Tribes (Klamath, Modoc, Yahooskin)

#### California

Tolowa Nation

Trinidad Rancheria

Yurok Indian Reservation

# Federal Elected Officials

U.S. Representative Hon. Jay Inslee WA District 1

U.S. Representative Hon. Rick Larsen WA District 2

U.S. Representative Hon. Brian Baird WA District 3

U.S. Representative

Hon. Cathy McMorris Rodgers

WA District 5

U.S. Representative Hon. Norm Dicks WA District 6

U.S. Representative Hon. Jim McDermott WA District 7

U.S. Representative Hon. Dave Reichert WA District 8

U.S. Representative Hon. Adam Smith WA District 9

U.S. Representative Hon. Greg Walden OR District 2

U.S. Representative Hon. Peter DeFazio OR District 4

U.S. Representative Hon. Darlene Hooley OR District 5

U.S. Representative Hon. Mike Thompson

CA District 1

U.S. Senator

Hon. Maria Cantwell, WA

U.S. Senator

Hon. Patty Murray, WA

U.S. Senator

Hon. Gordon Smith, OR

U.S. Senator

Hon. Ronald Wyden, OR

U.S. Senator

Hon. Barbara Boxer, CA

U.S. Senator

Hon. Dianne Feinstein, CA

# State Elected Officials

Governor of Washington Hon. Christine Gregoire

Washington State Senator Hon. Bob Morton, WA District

Washington State Senator Hon. Mary Margaret Haugen, WA District 10

Washington State Senator Hon. Brian Hatfield, WA District 19

Washington State Senator Hon. James Hargrove, WA District 24

Washington State Representative

Hon. Bob Sump, WA District 7,

Position 1

Washington State Representative

Hon. Joel Kretz, WA District

7, Position 2

Washington State Representative

Hon. Norma Smith, WA District

10, Position 1

Washington State Representative

Hon. Barbara Bailey, WA District 10, Position 2

Washington State Representative

Hon. Dean Takko, WA District

19, Position 1

Washington State Representative

Hon. Brian Blake, WA District

19, Position 2

Washington State Representative

Hon. Kevin Van De Wege, WA

District 24, Position 1

Washington State Representative

Hon. Lynn Kessler, WA District

24, Position 2

Governor of Oregon Hon. Ted Kulongoski

Oregon State Senator Hon. Jeff Kruse, OR

District 1

Oregon State Senator Hon. Joanne Verger, OR

District 5

Oregon State Senator Hon. David Nelson, OR

District 29

Oregon State Representative Hon. Wayne Krieger, OR

District 1

Oregon State Representative Hon. Arnie Roblan, OR District

Oregon State Representative Hon. Greg Smith, OR District

Governor of California Hon. Arnold Schwarzenegger

California State Senator Hon. Pat Wiggins, CA District 2

California State Senator Hon. Sam Aanestad, CA

District 4

California State Assembly Hon. Patty Berg, CA

District 1

# **Local Elected Officials**

City of Port Townsend Hon. Michelle Sandoval Mayor

City of Port Townsend Hon. Mark Welch City Councilmember

County of Grays Harbor

Hon. Al Carter

County Commissioner, District

# Local Agencies

City of Port Townsend Mr. David Timmons City Manager

Depoe Bay Nearshore Action

Team

Mr. John O'Brien

# Others

Olympic Coast National Marine Sanctuary Advisory Council

# **Individuals**

Doug Acmmon Aberdeen, WA

Gordon Anderson Arcata, CA

Dr. David Bain Friday Harbor, WA

Ben Baumgart Ocean Shores, WA

Ken and Jenee Bearden Aberdeen, WA

Peggy V. Beck Port Angeles, WA

Paul Boring Oak Harbor, WA

Ed Brewster Aberdeen, WA Ray L. Brown

Westport, WA

Jack Brown Depoe Bay, OR

Stephanie Buffum Field Friday Harbor, WA

Kelly Calhoun Moclips, WA Amy CareyJoseph C. HaguePatricia A. MillirenVashon, WAAberdeen, WAPort Angeles, WAKathleen ClearyTim HamblinGlen and Karol Milner

Eureka, CA

Don Coleman

Brinnon, WA

Nicole Cordon

Portland, OR

Seattle, WA

Seattle, WA

Herb Montano

Herb Montano

Pacific Beach, WA

David Helliwell

Kneeland, CA

Seattle, WA

Hontano

Pacific Beach, WA

Bow, WA

Susan L. Corran Brad Hoaré Michelle Myers Olympia , WA Lynnwood, WA Sedro Woolley, WA

F.V. Corregidor John Holbert Elena Nelon Kneeland, CA Brinnon, WA Lebanon, OR Scott Jacobs John Crowley S. Nelson Trinidad, CA Poulsbo, WA Bayside, CA **Brendan Cummings** Kathy Jaquet John E. Nelson Joshua Tree, CA Moclips, WA Quilcene, WA Shari Curtright Michael Jasny Janna Nichols Moclips, WA Vancouver, B.C. Vancouver, WA

Jack Davis Ryan Kaufman Pat Ohlsen Moclips, WA Brinnon, WA Moclips, WA Paul Deberdorff Kristin Kennell Linda Orgel Moclips, WA Quilcene, WA Aberdeen, WA Joann DeGrasse Jeff King Geoff Pentz Pacific Beach, WA Alameda, CA Silverdale, WA Jordan Kline William Dunaway Helen Peters

Port Townsend, WA

Aberdeen, WA

Copalis Beach, WA

John Erak

Aberdeen, WA

Katie Krueger

Aberdeen, WA

Sequim, WA

Fred Felleman Thea Lloyd Patricia Porter Seattle, WA Cosmopolis, WA Port Townsend, WA

Polly Fischer Katy Lubbe Pat Price
Anacortes, WA Kirkland, WA Moclips, WA
Kathy Fletcher Lee Marriott Edison K. Putnam
Seattle, WA Moclips, WA Olympia, WA

Gail Gage Brian Martin Michael Dennis Racine Bothell, WA Coupeville, WA Snoqualmie, WA

George Galasso Steve Mashuda S. Rangel

Port Angeles, WA

Seattle, WA

Pacific Beach, WA

Connie Gallant Ron and Vivian Matsen Tom and Pam Rasmussen Pacific Beach, WA Pacific Beach, WA

Loren Goddard Mac McDowell Jan Robison
Depoe Bay, OR Coupeville, WA Depoe Bay, OR

Marcy Golde Doug and Cathi McMurrin G. Thomas Schafer

Marcy Golde Doug and Cathi McMurrin G. Thomas Schafer Seattle, WA Pacific Beach, WA Moclips, WA

Lensifer Heavy Dougland Cathi McMurrin Moclips, WA

Lensifer Heavy Dougland Cathi McMurrin Moclips, WA

Lensifer Heavy Dougland Cathi McMurrin Moclips, WA

Jennifer HagenPamela MillerLen SchillingForks, WAArcata, CAOak Harbor, WA

James Schroeder Seattle, WA Cate Skinner Pacific Beach, WA Wayne and Cate Skinner

Stan Stanley Oak Harbor, WA Will T. Stiner

Copalis Beach, WA

Moclips, WA

Douglas Switzer Renton, WA

Michael and Cheri Tacy

Moclips, WA James R. Thiele Hillsboro, OR Amy Trainer

Friday Harbor, WA Anneka and Wolter van

Doorninck

Copalis Beach, WA

Dr. Val Veirs

Colorado Springs, CO

Jowcol Vina Seattle, WA John Volz

Pacific Beach, WA

Peggy Willis Seattle, WA

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# Appendix G

**Public Comments and Responses** 

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# **G Public Comments and Responses**

The Navy received public comments on the Draft EIS/OEIS via three media; written comments, website comments, and oral comments. Regardless of the medium, all comments have been treated equally. The comments are from the public comment period for the document, December 29, 2009 through April 13, 2009.

Written comments were received primarily through the mail, although several were accepted through email or facsimile submission. Website comments were submitted to the Navy via the project website. Oral comments were taken directly from the official court reporter transcripts. To allow side-by-side review of the comments and the Navy responses, all comments have been converted to text and entered into a table format that follows, with the comment in one column and the Navy's response in the next column. The comments have been reproduced faithfully and as accurately as possible. In some cases, the editors may have made minor errors in the translation of some handwritten letters. Appendix H contains a copy of each of the written comments and Appendix I contains the official court transcripts of the oral comments, as received. Website comments were electronically submitted and copied directly into this Appendix, so no other reproduction was necessary.

In preparing the Northwest Training Range Complex (NWTRC) Draft EIS/OEIS each resource section was prepared and reviewed by numerous qualified individuals, each specialists in their respective fields, to ensure that the resources and issues received a rigorous and thorough assessment. The best available scientific data and the latest peer-reviewed studies were considered.

In this Final EIS/OEIS, the Navy has made changes to the Draft EIS/OEIS, based on comments received during the public comment period. These changes included factual corrections, additions to existing information, and improvements or modifications to the analyses in the Draft EIS/OEIS. This section presents the public comments received and the Navy's responses to these comments. The public should note that these changes are non-substantive and do not result in any significant modifications to the proposed action, the alternatives considered, the affected environment or the environmental effects analyses of the Draft EIS/OEIS.

Although all comments have been read and considered, some comments were not specific regarding the analyses or the alternatives in the Draft EIS/OEIS and, therefore, could not be given specific responses. As stated in the Council on Environmental Quality's (CEQ) Regulations for Implementing the National Environmental Policy Act (NEPA), 40 CFR Part 1503.3(a), "Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both."

# G.1 WRITTEN PUBLIC COMMENTS

The comments in this section were received in written form by organizations, agencies, tribes and individuals.

ID	Issue Text	Response Text
Aguilar-01	As a resident of Mendocino County I do <u>not</u> support this Navy underwater drilling project. I would like to have my children have a save the natural beauty of our north coast waters. And also save all the living creatures that live in the Pacific Ocean.	The NWTRC EIS proposed action does not involve underwater or underground drilling. Nor does the project involve Mendocino County. The boundary of the range complex lies just north of the waters off Mendocino County, California.
	Please don't destroy our beautiful waters by doing this underground drilling.	
	I am writing this letter as a shocked and concerned citizen living near the coast of Northern California.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued
	It's outrageous to even consider military testing of missiles, underwater explosives and sonar in our ocean.	training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Aikman-01	Our coast is the migratory route of the Pacific Gray Whale that would be threatened. All other ocean life would be adversely affected as well.	The Navy is aware of the diverse biological presence in the area and has conducted a thorough analysis of potential effects in Chapter 3 of the
	Your testing will cause irreversible damage.  Where is your compassion for the well being and future of all ocean life?	Draft EIS/OEIS.
	Stop this plan!!	
Allen-01	The coastal commission has to do an environmental study.	The Navy will ensure compliance with the Coastal Zone Management Act.
Alto-01	I have read through the EIS data. It seems to me that that most of the findings on potential adverse effects on marine life are based on incomplete data, or assumed marine animal responses. There is really no way to know with 100% certainty the real impact of the NWT complex. Assuming that there is little to no impact on marine life as the EIS suggests in most cases. I am concerned about what the Navy is going to do to try to avoid conflict with fishing areas. During the summer months large amounts of albacore tuna fishermen are out on the fishing grounds off shore which would most likely be near Navy training exercises. Tuna trollers follow the schools of fish which may move several miles each day. If Naval exercises are being conducted and blocking off large areas of water this obviously would cause a decrease in catch for fishermen unable to move freely throughout the area.	The analysis included in the Draft EIS/OEIS includes the best available science available for determining effects on marine life. As an example, the acoustic modeling used to derive exposure estimates was developed in coordination with the National Marine Fisheries Service, which is responsible for the protection of marine species.  The Navy is very aware of concerns from fishing fleets in the Pacific Northwest.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  Of primary importance, there are no restricted areas in the NWTRC.
		Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Alto-02	Further these fleets of small vessels drift at night, and even with modem electronics the increase in Naval traffic could cause a collision. There has also always been speculation of submarine activity possibly entangling trawl nets or cables and pulling, vessels down. What is the Navy's position on this? Fishermen on the West Coast are already having a hard time, with decreased fishing opportunity, failing fish runs and potential near shore marine reserves that would be no-take areas further diminishing fishing areas.	There have been no documented instances within the NWTRC of U.S. submarine entanglement in fishing gear, causing damage to the fishing vessel. In the case of an incident as described, fishermen can make an admiralty claim for reimbursement for any damage.
Alto-03	Further adverse affects due to increased maritime traffic, or underwater detonations damaging fish populations caused by expanded operations in the NWT complex could cause further economic hardship for these fishing families.	See response to comment #1 above. The potential impact to fish populations was described in the Draft EIS/OEIS in Section 3.7. The economic impacts are found in Section 3.14.

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Amberg-01	It is imperative that a No Action Alternative be taken with regard to the proposed expansion of navy marine training activities connected with the NW Training Range Complex.	This comment is duly noted. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Amberg-02	The navy should NOT conduct any sonar testing, should not be detonating explosives, using depleted uranium or dumping toxic pollutants in sensitive marine protection areas such as Admiralty Inlet, the Strait of Juan de Fuca, the Olympic National Sanctuary, or any coastal areas. These regions are delicate ecosystems which are literally attached to our own human communities: Whidbey Island, Port Townsend, Olympic Peninsula. We all are aware that a diverse population of threatened and endangered marine mammals, fish and sensitive coastal; habitats are attempting to regain vitality in these areas. It is our responsibility to nourish the well-being and viability of these communities, which are integrally connected to human health, vitality and well-being.  A No Action Alternative should be taken. This is something a 5 year old understands:	The Navy is aware of the diverse biological presence in the area and has conducted a thorough analysis of potential effects in Chapter 3 of the Draft EIS/OEIS. The Navy does not dump toxic pollutants into sensitive marine protection areas. Please see Chapter 3 of the EIS/OEIS for the description and analysis of potential effects. Chapter 4 includes cumulative analysis of all past, present, and reasonably foreseen future projects by the Navy and non-Navy activities.
	It is NOT acceptable for us to destroy, abuse, explode, kill, traumatize, fragment, disorient, massively degrade, force extinction upon, irreversibly toxify, abandon, or pollute beyond recognition gray whales and their young, Chinook salmon, sea bird nesting sites, feeding humpback whales, orca resident families and transient pods, pinnipeds, porpoise, dolphins, otters and any of the 29+ marine mammal species that live in the WA and OR coastal and inland protected waters.	
Amberg-03	It is obvious that depleted uranium should not be used in these training procedures. It should not be used anywhere. Depleted uranium irreversibly destroys human and animal DNA. This is permanent. Depleted uranium causes birth defects and cancer. Uranium has a half life of 4.5 billion years, so depleted uranium released into the environment will be a hazard for unimaginable timescales.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Amberg-04	The EIS does not adequately address hazards and potential lethal effects of weapons detonation and sonar testing. As the Orca Network has explained in detail, recognition of the presence of marine mammals is difficult even in good/conditions. It's almost impossible to reliably detect marine mammals visually or acoustically underwater or in rough weather, especially when compounded by training conditions. A No Action Alternative should be taken. If any testing does occur, a highly experienced whale biologist should be training the monitoring personnel.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
DIRI IC DADTICIDATI		Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species

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		during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Amberg-05	Whales and many marine mammals depend on a long and short-range subtle vibrational communications and signals for their survival. This is how they "see" and connect with each other and their habitat. If we wish to torture a child, we could peel their eye lids back and force a close-range laser beam directly into their eyes, repeatedly, until the child looses consciousness and dies or is permanently disabled. Does the Navy understand the gravity of what it is proposing?  Sonar weapons and testing cause lethal injuries in the form of abrasions to animal ears and lungs, or trauma triggering panicked surfacing. Sonar testing can also cause sublethal injuries such as loss of hearing or orientation may effect behavioral changes that can also be long-term in nature and result in reduced survival. Injurious effects can harm individuals or populations, especially through repeated activity.  Sonar testing abuses and disorients whales and other marine mammals, and can potentially cause young whales to be separated from mothers.	The Navy shares your concern for marine life. All of the possible effects you describe were analyzed in the Draft EIS/OEIS. Also, as described in the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training
	Explosives and weapons testing could cause permanent collapse of the interconnectivity of the mammal family groups and community.	exercises as proposed in the Draft EIS/OEIS.
Amberg-06	A No Action Alternative should be taken.  Disregard of cumulative impacts of everything from spent materiel to engine waste by multiple vessels and aircraft, all simulating wartime decision-making, certainly has a destructive effect on functioning marine ecosystems. In war, military forces can claim the luxury of focusing on short-term results of their decisions, if they are to defeat the enemy. While recognizing that current international relationships are conducive to preparation for war, it is precisely the need to consider the downstream effects of our decisions, down unseen generations, that is called for if we are to hold any hope of passing a livable world to future generations. More creative solutions for the problems now at our doorstep and looming dark on the horizon must be put forth, than to simply prepare for and risk returning to wartime thinking.  Can we call forth a bit of wisdom to live as a responsible part of our natural community, with a responsibility to it's continuity??  We can no longer afford to behave anthropocentrically, with an attitude of domination, superiority, and unquestioned aggression. We need to recognize the inherent rights and irreplaceable value of mammals, fish, birds, and marine ecosystems. Marine mammals, fish, birds, and marine ecosystems have values. Do we?	This comment is duly noted.
Anderson J-01	I am responding to an article published in my local paper regarding the plans to expand Naval training in my state - I am very much opposed to the Navy's proposal to expand training activities	This comment is duly noted.

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	off the Oregon coast for the following reasons: In a time of an extreme economic downturn I see no logical reason to seek out reasons to spend even more taxpayers' dollars on defense. The defense department already takes way more than its share of federal revenue that would be better spent on education and other improvements.	
Anderson J-02	I find it particularly offensive that your "environmental" spokesperson, Ms. Murray, would say that these operations will not leave anything that will be "seen" so therefore it shouldn't matter to us - as if we're so ignorant we can be led to believe that just because we can't "see" the detrimental effects of something happening under the surface of the ocean, even though all signs would lead us to suspect otherwise, nothing is really happening that need concern us.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.
Anderson J-03	Why would we be OK with putting depleted uranium in our oceans?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Anderson J -04	We know that sonar effects marine life negatively, is possibly even lethal. Most people who care about the perpetuation of our marine resources would rather see no more sonar, and certainly not an escalation of it.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Anderson J -05	And you are planning to use live missiles off the coast and we're to believe that no civilians will become "collateral damage" during these exercises? I don't think your track record on this is too reassuring.	The Navy's proposed action does include live missile firings off the coast of Washington in designated Warning Areas. The Navy is proud of its safety record during live weapons training. A complete safety analysis, include numerous safety procedures are contained in Section 3.16 of the Draft EIS/OEIS.
Anderson J -06	I plan to contact my Representatives to express my concerns about this matter, and I think it is unconscionable that the Navy is refusing to allow extended time for public input on this matter - you have managed to be very quiet about this - no pun intended, but I think you're hoping it slips beneath the radar and we all pretend what we can't see won't really hurt us. I sincerely hope you will reconsider.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Anderson J-07	1. When you refer to the "socioeconomic" impact of your plan, why is there no mention of expenditure of citizens' tax dollars? You already get far more than your share of my taxes. I want to see my taxes used for something like education, healthcare, etc. – not warmongering.	The issue of how tax resources are allocated to the Department of Defense goes beyond the scope of this EIS/OEIS.

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Anderson J-08	2. I resent the Navy's assumption that it can dump weapons into our ocean—as if we can treat our oceans like a huge toilet. It's way beyond time to get past that mindset.	The potential effects of the Navy's proposed action were described in Chapter 3, potential cumulative effects have been discussed in Chapter 4, and mitigation meansures of unavoidable effects have been discussed in Chapter 5 of the EIS/OEIS.
Anderson J-09	3. Your plans for flooding our ocean with sonar is too premature—I'm convinced you do not really understand that potential threat to marine life.	The science of sound in the water and its effects on marine life is evolving. The Navy conducted a thorough analysis of sonar and underwater detonations in the Draft EIS/OEIS, using the best available science, and with cooperation from the National Marine Fisheries Service, which is responsible for the protection of marine species.
Anderson K-01	I live in Fort Bragg on the California north coast. I oppose the navy extending its training area along our coast. I urge you to prevent all government or private business interests from taking claim to any aspect of the ocean environment along the Northwest Pacific Coast.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Anderson K -02	The Fort Bragg/Mendocino area is a favorite tourist destination. People who visit our area come for the beautiful ocean views, the walks along the seaside bluffs, the fresh air and the quiet. We fear that the sight of naval vessels on the ocean, the sight and sound of overhead aircraft would destroy the appeal our economy depends on.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships. In addition, Fort Bragg/Mendocino is outside of the NWTRC Area.
Anderson K -03	The nearly pristine ocean waters off the Northwest Coast of California, Oregon and Washington Northwest Pacific waters are perhaps one of the more environmentally intact ocean ecosystems that we have left in the World. No one should be granted the right to pollute ocean waters and inevitably harm creatures that dwell in coastal and pelagic waters. Organizations sometimes think they have a mandate, their over-riding rationale convince them that their actions are valid. Please don't let the health of the ocean be a tradeoff for the creation of new jobs or the testing of new weapons.	The Navy shares your concern for marine life. As described in the Draft EIS/OEIS, the Navy implements protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts. The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
	I am sure that you are aware that the giant kelp forests of the Northwest Pacific are home to myriad wonderful sea creatures. The grey whale makes its yearly travels between feeding and breeding grounds through the coastal waters of the Northwest Pacific. Besides pollution by chemical contaminants in the water and in whales' food sources from increased naval presence, the impacts of sonar testing are known to harm whale species. If for no other reason, don't add further negative pressure to the world's threatened fish populations by allowing the U.S. Navy to carry out this dreadful plan.	The analysis included in the Draft EIS/OEIS included the best available science for determining effects on marine life. As an example, the acoustic modeling used to derive sonar exposure estimates was developed in coordination with the National Marine Fisheries Service (NMFS),a cooperating agency on this EIS/OEIS. NMFS is responsible for the protection of marine specie, and in consultation with the Navy, will consider all potential effects to marine mammals and threatened and endangered species from the Navy's proposed action.
Anderson K -04		The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.

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Anderson K -05	We understand that the Navy proposes to comply with all the federal rules and regulations. But can they guarantee that they will have no impact whatsoever on marine life, noise levels, and visual effects?	The Navy can not make any guarantee that its proposed action will have no effect on the marine and human environment. In fact, these potential effects were described in Chapter 3 of the Draft EIS/OEIS.
Anderson K -06	Those of us who live here love the ocean and the ocean life; we love the unspoiled landscapes, the quiet, and the exquisite views. We love to see the whales and the shore birds, to examine the tide pools, and to watch the sunset from the ocean bluffs.	Please see Chapter 3 of the EIS/OEIS for the description and analysis and potential effects. Specifically, those effects to the economy are found in Section 3.14; to marine life in Sections 3.6 through 3.10.
	We worry that the training will negatively affect our own lives as well as the economy, the local marine life, and the calm and peacefulness of our coastline.	
	Please do not conduct Naval training off of our coast.	Two OD agains were part to Ma Anderson and Lawrence C 2000. It is
Anderson W-01	Please send me two CD copies of the Draft Environmental Impact Statement/Overseas Environmental Impact Statement as announced in the 29 December Federal Register regarding the Northwest Training Range Complex expansion. Given the Federal Register instructed the public to mail in this request, I need to point out that the mail time to and from your office will take five to seven days. The first public hearing is 27 January, in Oak Harbor, some three weeks after I and others will receive the EIS/OEIS materials. Unfortunately, this is not an optimal time span to read and prepare informed questions for the public hearing. I would also ask why Seattle was passed over as a site for one of these hearings. Most interested regional NGOs are located in and near here. Please consider adding a Seattle hearing venue.	Two CD copies were sent to Mr. Anderson on January 6, 2009. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	The mailing address for the CDs is: Will Anderson	
	2122 - 8th Avenue N, #201 Seattle, WA 98109	
	Please send to me any information re: the U.S. Navy testing program in the Pacific Ocean.	All pertinent information necessary to comment on the Draft EIS/OEIS was available for download from the NWTRC EIS website. Additionally, this proposed action does not include weapons testing.
	The DEIS meeting is to be on April 13 <sup>th</sup> .	The only testing proposed in the EIS/OEIS is for testing of unmanned
Andreason-01	The environmental effects are in question- along with the concern for the ocean wildlife and fishing families.	aerial systems (UAS) as described in the Draft EIS/OEIS in Section 2.4.1.8.
	To create a transparent atmosphere re: both sides, your information (form your standpoint) is very important.	
Animal Welfare Institute (AWI)-01	On behalf of the Animal Welfare Institute (AWI), I am writing to request a copy of the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Northwest Training Range Complex (73 FR 79856). If available, I would appreciate receiving a hard copy and CD-ROM/DVD of the Draft EIS. If only available on a CDROM or DVD, that would suffice.	A hard copy and a CD-ROM copy of the Northwest Training Range Complex Draft EIS/OEIS was delivered to Mr. Schubert on February 6, 2009.
AWI -02	I would note that though the Department of the Navy has published a Federal Register notice announcing that it has prepared and filed with the U.S. Environmental Protection Agency the Draft EIS, it fails to provide any	A Notice of Public Hearings was published in the <i>Federal Register</i> on December 30, 2008. This notice specifically listed library repositories where the hard copy document could be viewed, and stated specifically

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	direction in its notice as to where the public can obtain a copy of the document. While the document is available for download at the website referenced in the Federal Register notice, there is no explicit reference to the availability of the document at that website. For those interested members of the public who may not be able to download and store the document on a home or office computer, they require alternative means of obtaining a copy of the document. The Department of the Navy, therefore, must publish a	that the document could be viewed online at the project website.  In addition, specific mention of the locations where a copy of the Northwest Training Range Complex Draft EIS/OEIS could be viewed or downloaded were made in the following:  - Postcards sent to potentially affected Tribes and Nations, State and Federal regulatory and government agencies, non-governmental organizations, fishing groups, and individuals
	notice advising the public where it can obtain a copy (hard copy or electronic copy) of the Draft EIS.  Thank you in advance for fulfilling this request. Please send the requested document to D.J. Schubert , Animal Welfare Institute, 3121-D Fire Road, PMB#327, Egg Harbor  Township, NJ 08234.	<ul> <li>Newspaper advertisements on 5 separate dates in 6 newspapers in Washington, Oregon, and California.</li> <li>Press releases to numerous print, TV, and online media</li> <li>Meeting flyers sent to 19 community locations in the Pacific Northwest</li> <li>Stakeholder letters sent to previously identified stakeholders including Tribes and Nations, Federal and State elected officials, State and Federal regulatory and government agencies, and individuals</li> </ul>
Arntz-01	Thank you so much for receiving our comments and we do love the U.S. Navy.  It's just hard to believe that the Northwest Training Range Complex couldn't be positioned 100 or 200 miles farther west. My concern is for the whales and dolphins whose ears may be affected. They cannot change their patterns but humans can.  Since the Navy is so much a part of our environment, I hope that the Navy could realize that whales and dolphins bring us great joy as a part of the Pacific too.  I love you both and if possible give a little. We can only love you more.	The Navy shares your concern for marine life. As described in the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Asher-01	We can't afford to destroy our environment or the animals on our planet. Please do not do this!	This comment has been duly noted.
Bain -01	[Provided as appendix to Natural Resources Defense Council comment]  CRITIQUE OF THE RISK ASSESSMENT MODEL EMPLOYED TO CALCULATE TAKES IN THE HAWAII RANGE COMPLEX SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT  David E. Bain, Ph.D.  Abstract  1. Rather than using a fixed received level threshold for whether a take is likely to occur from exposure to mid-frequency sonar, the Navy proposed a method for incorporating individual variation. Risk is predicted as a function of	In reviewing whether the parameters employed were based upon the best available science, the implications in the uncertainty in the values, and biases and limitations in the risk function criteria, The commenter asserted that data were incorrectly interpreted by NMFS when calculating parameter values, resulting in a model that underestimates takes. NMFS, in its regulatory capacity for the MMPA, chose the data sets, interpreted the data, and set parameters for the risk function analysis to quantify exposures to mid-frequency sound sources NMFS may classify as Level B takes for military readiness activities. Of primary importance to The commenter was that the risk function curves specified by NMFS do not account for a wide range of frequencies from a variety of sources (e.g.,

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	three parameters: 1) a basement value below which takes are unlikely to occur; 2) the level at which 50% of individuals would be taken; and 3) a sharpness parameter intended to reflect the range of individual variation.	motor boats, seismic survey activities, "banging on pipes"). In fact, all of The commenter's comments concerning "data sets not considered" by NMFS relate to sound sources that are either higher or lower in frequency than MFA sonar, are contextually different (such those presented in whale watch vessel disturbances or oil industry activities), or are relatively continuous in nature as compared to intermittent sonar pings. These sounds from data sets not considered have no relation to the frequency or duration of a typical Navy MFA sonar as described in the Draft EIS/OEIS. As discussed above and in the Draft EIS/OEIS, NMFS selected data sets that were relevant to MFA sonar sources and selected parameters accordingly. In order to satisfy The commenter's concern that a risk function must be inherently precautionary, NMFS could have selected data sets and developed parameters derived from a wide variety of sources across the entire spectrum of sound frequencies in addition to or as substitutes for those that best represent the Navy's MFA sonar. The net result, however, would have been a risk function that captures a host
		of behavioral responses beyond those that are biologically significant as contemplated by the definition of Level B harassment under the MMPA applicable to military readiness activities. The commenter's specific comments and the Navy's responses are provided below.
Bain -02	2. Errors included failure to recognize the difference between the mathematical basement plugged into the model, and the biological basement value	Given the results of the modeling for NWTRC, having a lower basement value would not result in any significant number of additional takes. This was demonstrated in the Draft EIS/OEIS (Table 3.9-3; page 3.9-82) showing that less than 1% of the predicted number of harassments resulted from exposures below 140 dB. The commenter further suggests that the criteria used to establish the risk function parameters should reflect the biological basement where any reaction is detectable. The MMPA was not intended to regulate any and all marine mammal behavioral reactions. Congress amended the MMPA to make clear its intention with the amendment to the MMPA for military readiness activities as enumerated in the following National Defense Authorization Act clarification - (i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A Harassment]; or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered. NMFS, in its regulatory capacity for the MMPA, chose the data sets and parameters for use in the risk function analysis to regulate military readiness activities. Congress, by amending the MMPA, specifically is not regulating any and all behavioral reactions.
Bain -03	3. Errors included failure to recognize the difference between the mathematical basement plugged into the model, and the biological basement value, where the likelihood of observed and predicted takes becomes nonnegligible; using the level where the probability of take was near 100% for the level where the probability of take was 50%; and extrapolating values derived	NMFS, as a cooperating agency and in its role as the MMPA regulator, reviewed all available applicable data and determined that there were specific data from three data sets that should be used to develop the criteria. NMFS then applied the risk function to predict exposures that resulted in exposures that NMFS may classify as harassment. NMFS

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	from laboratory experiments that were conducted on trained animals to wild animals without regard for the implications of training; and ignoring other available data, resulting in a further underestimation of takes. In addition, uncertainty, whether due to inter-specific variation or parameter values based	developed two risk curves based on the Feller adaptive risk function, one for odontocetes and one for mysticetes, with input parameters of B=120 dB, K=45, 99% point = 195 dB, 50% point = 165 dB.
Bain -04	4. In addition, uncertainty, whether due to inter-specific variation or parameter values based on data with broad confidence intervals, results in the model being biased to underestimate takes. The model also has limitations. For example, it does not take into account social factors, and this is likely to result in the model underestimating takes.	The risk function methodology assumes variations in responses within the species and was chosen specifically to account for uncertainties and the limitations in available data. NMFS considered all available data sets and determined it to be the best data currently available. While the data sets have limitations, they constitute the best available science.
Bain -05	5. The model also has limitations. For example, it does not take into account social factors, and this is likely to result in the model underestimating takes. This analysis has important management implications.	The commenter was concerned that if one animal is "taken" and leaves an area then the whole pod would likely follow. As explained in Appendix D of the Draft EIS/OEIS, the model does not operate on the basis of an individual animal but quantifies exposures NMFS may classify as takes based on the summation of fractional marine mammal densities. Because the model does not consider the many mitigation measures that the Navy utilizes when it is using MFA sonar, to include MFA sonar power down and power off requirements should mammals be spotted within certain distances of the ship, if anything, it over estimates the amount of takes given that large pods of animals should be easier to detect than individual animals.
Bain -06	6. First, not only do takes occur at far greater distances than predicted by the Navy's risk model, the fact that larger areas are exposed to a given received level with increasing distance from the source further multiplies the number of takes. This implies takes of specific individuals will be of greater duration and be repeated more often, resulting in unexpectedly large cumulative effects. Second, corrections need to be made for bias, and corrections will need to be larger for species for which there are no data than for species for which there are poor data.	Modeling accounts for exposures NMFS may classify as takes at distances up to 130 km as described in the Draft EIS/OEIS (Table 3.9-3). As discussed in Appendix D of the Draft EIS/OEIS, the NWTRC OPAREA contains a total of 47 distinct environmental provinces with specific sound propagation characteristics. These represent the various combinations of nine bathymetry provinces, four Sound Velocity Profile provinces, and six high frequency bottom loss classes. Based on these different provinces, the Navy identified 16 different representative sonar modeling areas to fully encompass sound attenuation within the NWTRC OPAREA. Within these provinces, sound attenuated down to 140 dB at distances out to about 130 km (Table 3.9-3). Using these sound propagation characteristics, the risk function modeling for the NWTRC Range Complex resulted in less than 1% of the exposures that NMFS may classify as a take occurring below 140 dB. The area encompassed by this sound propagation, as determined by NMFS for exposures that may constitute harassment, avoids a bias towards underestimation because the risk function parameters were designed with this in mind.
Bain -07	7. Third, the greater range at which takes would occur requires more careful consideration of habitat-specific risks and fundamentally different approaches to mitigation.	Section 5.2.1 of the Draft EIS/OEIS evaluated alternative and/or additional mitigations, specifically, as it relates to potential mitigation approaches. The examples of the fundamentally different approaches noted in the comment were addressed in this section of the Draft EIS/OEIS. In addition, NMFS has identified general goals of mitigation measures. These goals include avoidance or minimization of injury or death, a reduction in the number of marine mammals exposed to received levels when these are expected to result in takes, a reduction in the number of times marine mammals are exposed when these are expected

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		to result in takes, a reduction in the intensity of exposures that are expected to result in takes, and reduction in adverse effects to marine mammal habitat.
		In this regard, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective. For example, the safety zones reduce the likelihood of physiological harm, the number of marine mammals exposed, and the intensity of those exposures.
		NMFS and Navy have determined that mitigation measures in conjunction with our understanding of decades of sonar use has resulted in only negligible impacts in the NWTRC Range Complex. Mitigation measures that are practicable involve those that reduce direct physiological effects within the TTS and PTS thresholds.
Bain -08	8. The population effects of Level A takes on populations are relatively easy to assess, as individuals that are killed are obviously removed from the population, and those that are injured are more likely to die whenever the population is next exposed to stress.	Navy agrees with the comment and notes that the recently documented increase in many populations of endangered and non-endangered species in the NWTRC, where decades of sonar use, training, and RDT&E have occurred, would suggest that there is an absence of Level A effects from those activities.
Bain -09	9. Temporary Threshold Shifts in captive marine mammals are commonly used as an index of physical harm (e.g., Nachtigall et al. 2003, Finneran et al. 2002 and 2005, Kastak et al. 2005). Limiting experimental noise exposure to levels that cause temporary effects alleviates ethical concerns about deliberately causing permanent injury. However, repeated exposure to noise that causes temporary threshold shifts can lead to permanent hearing loss. In fact, chronic exposure to levels of noise too low to cause temporary threshold shifts can cause permanent hearing loss.	This issue was recognized and discussed as presented in the Draft EIS/OIES (Section 3.9.2.1.8, page 3.9-76). Based on prior National Oceanic and Atmospheric Administration rulings, NMFS established that exposures resulting in Level A and B harassment cannot be considered to overlap in an analysis of impacts, otherwise the regulatory distinction between the two criteria would be lost and the take quantification required would be ambiguous. To facilitate the regulatory process, a clear and distinct division between Level A and Level B harassments was maintained as required by NMFS in its role as the regulator and a cooperating agency in the Draft EIS/OEIS.
Bain -10	10. Changes in behavior resulting from noise exposure could result in indirect injury in the wild. A variety of mechanisms for Level B harassment to potentially lead to Level A takes have been identified.	This issue was recognized and discussed as presented in the Draft EIS/OIES (Section 3.9.2.1.8). Based on prior National Oceanic and Atmospheric Administration rulings, NMFS established that exposures resulting in Level A and B harassment cannot be considered to overlap in an analysis of impacts, otherwise the regulatory distinction between the two criteria would be lost and the take quantification required would be ambiguous. To facilitate the regulatory process, a clear and distinct division between Level A and Level B harassments was maintained as required by NMFS in its role as the regulator and a cooperating agency in the Draft EIS/OEIS.
Bain -11	Captive cetaceans Studies of captive marine mammals provide an excellent setting for identifying direct effects of sound. E.g., one of the datasets employed by the Navy consists of studies relating short-term exposure of bottlenose dolphins and belugas to high levels of noise to Temporary Threshold Shifts. The Navy (Dept. Navy 2008b, p 3-7) noted aggressive behavior toward the test apparatus, suggesting stress was another consequence of the test (see also Romano et al. 2004). Such effects would be unconditional results of noise	This was specifically addressed in the Draft EIS/OEIS (Section 3.9.2.1.8) and considered as part of this decision making process. Additional data sets from wild animals were incorporated into development of the risk function parameters specifically to address this concern. Additionally, as discussed in Domjan 1998, and as cited in the Draft EIS/OEIS, animals in captivity can be more or less sensitive than those found in the wild. It does not follow, therefore, that the risk function modeling underestimates takes.

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	exposure. However, extrapolation of the level at which aggression was observed to the level at which behaviorally mediated effects might occur in the wild is problematic, as this depends on how well trained the subjects were. For example, the Navy has been a leader in training dolphins and other marine mammals to cooperate with husbandry procedures.	
	Tasks like taking blood, stomach lavage, endoscopic examination, collection of feces, urine, milk, semen and skin samples, etc. once required removing individuals from the water and using several people to restrain them. With training, painful and uncomfortable procedures can be accomplished without restraint and with a reduction in stress that has significantly extended lifespans of captive marine mammals (Bain1988).	
Bain -12	12. Right whales exposed to alerting devices consistently responded when received levels were above 135 dB re 1 $\mu Pa$ . Due to the small sample size (six individuals), it is unclear whether this is close to the 50% risk, the 100% risk level, or both. These data do not allow identification of B, as lower exposure levels were not tested. In mysticetes exposed to a variety of sounds associated with the oil industry, typically 50% exhibited responses at 120 dB re 1 $\mu Pa$ . Thus right whales may be similar to killer whales.	It is noted that an apparent factual inaccuracy with regard to the only citation provided for the repeated assertion that 50% of marine mammals will react to 120 db re 1uPa. Malme et al., (1983, 1984) indicated that for migrating whales, a 0.5 probability of response occurred at 170 dB.
	See Table 1: Bain Appendix H Datasets not considered	The data sources the commenter presents as needing consideration involve contexts that are not applicable to the proposed actions or the
Bain -13	The Navy incorrectly concluded that additional datasets are unavailable. In addition to the other killer whale datasets mentioned above, data illustrating the use of acoustic harassment and acoustic deten:-ent devices on harbor porpoises illustrate exclusion from foraging habitat (Laake et al. 1997, 1998 and 1999, 01esiuk et al. 2002). Data are also available showing exclusion of killer whales from foraging habitat (Morton and Symonds 2002), although additional analysis would be required to assess received levels involved. The devices which excluded both killer whales and harbor porpoises had a source level of 195 dB re 1 ~a, a fundamental frequency of 10kHz, and were pulsed repeatedly for a period of about 2.5 seconds, followed by a period of silence of similar duration, before being repeated. Devices used only with harbor porpoises had a source level of 120-145 dB re 1 IIPa, fundamental frequency oft0 kHz, a duration on the order of 300 msec, and were repeated every few seconds. Harbor porpoises, which the Navy treats as having a B+K value of 120 dB re IIIPa (with A large enough to yield a step function) in the AFAST DEIS (Dept.Navy 2008a), 45 dB lower than the average value used in the HRC SDEIS, may be representative: of how the majority of cetacean species, which are shy around vessels and hence poorly known, would respond to mid-frequency sonar. Even if harbor porpoises were given equal weight with the three species used to calculate B+K, including them in the average would put the average value at 154 dB re 1 IIPa instead of 165 dB re 1 IIPa.	sound exposures resulting from those actions. For instance, the commenter's citation to Lusseau et al. (2006) involve disturbance over a three year period to a small pod of dolphins exposed to "8,500 boat tours per year", which is nothing like the type or frequency of action that is proposed by the Navy for the NWTRC. In a similar manner, the example from noise used in drive fisheries are not applicable to Navy training. Navy training involving the use of active sonar typically situations ships where the ships are located miles apart, the sound is intermittent, and the training does not involve surrounding the marine mammals at close proximity. Further, suggestions that effects from acoustic harassment devices and acoustic deterrent devices which are relatively continuous sound sources (unlike MFA sonar) and are specifically designed to exclude marine mammals from habitat, are also fundamentally different from the proposed actions and the use of MFA sonar. Finally, reactions to airguns used in seismic research or other activities associated with the oil industry are also not applicable to MFA sonar since the sound/noise sources, their frequency, source levels, and manner of use are fundamentally different.
Bain -14	14. An important property of the model is that the biologically observed basement value is different than the mathematical basement value. The Navy proposes using 120 dB re I ~Pa as the basement value. They indicate the selection of this value is because it was commonly found in noise exposure	It is noted that an apparent factual inaccuracy with regard to the only citation provided for the repeated assertion that 50% of marine mammals will react to 120 db re 1uPa. Malme et al., (1983, 1984) indicated that for migrating whales, a 0.5 probability of response occurred at 170 dB.

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	studies.	
Bain -15	15. For example, many looked at changes in migration routes resulting from noise exposure, and found that 50% of migrating whales changed course to remain outside the 120 dB re 1 $\mu$ Pa contour (Malme et al. 1983, 1984). These results might be interpreted in several ways. They could be seen as minor changes in behavior resulting in a slight increase in energy expenditure. Under this interpretation, they would not qualify as changes in a significant behavior, and are irrelevant to setting the basement value. They could be interpreted as interfering with migration, even though the whales did not stop and turn around, and hence 120 dB would make an appropriate B+K value rather than B value. Third, the change in course could have been accompanied by a stress response, in which case the received level at which the course change was initiated rather than the highest level received (120 dB re 1 $\mu$ Pa) could be taken as the biological basement value.	See response to #14 above.
Bain -16	See Table 2: Bain Appendix H Range Complex SDEIS (Dept. Navy 2008b), which in tum is based on the No Action Alternative, Table 3.3.1-1. Where the number of takes approaches the size of the population, the actual number of takes will be smaller than shown in the table. However, individuals will be taken multiple times and the duration of takes will be longer than if the calculated number of takes were small. Presumably, longer and more frequent takes of individuals will have more impact on the population than takes due to single exposures.	The values suggested as parameters, the results of which are presented in the above mentioned tables, are not reasonable given the environmental conditions in NWTRC have ambient noise (naturally occurring background noise) levels at or above those suggested by the commenter as behavioral harassment "B" basement values. The use of these results for examination of potential uncertainty and bias in the risk function as presented in the Draft EIS/OEIS is, therefore, not informative or applicable in the NWTRC context.
Bain -17	See Table 3: Bain Appendix H  Table 3. Sensitivity analysis based on a model with spherical spreading for 2 km followed by cylindrical spreading.	See response to #16 above.
Bainbridge-01	Although there are valid national security reasons for naval training and conducting tests, doing them in such a way that harms the environment is inconsistent with the will of the people, as expressed by their election of a President and Commander-in-Chief who ran on a platform of national security AND protection of the environment.	The Navy's proposal is designed to accommodate the necessary training while minimizing impacts to marine life using the best available science, as discussed and analyzed in this EIS/OEIS.
Bainbridge-02	I support the <u>NO ACTION</u> ALTERNATIVE, due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's expansion on these species.	This comment has been duly noted. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Bainbridge-03	In addition, I ask that the <u>comment period BE EXTENDED</u> since the website for submitting comments was non-functional during more than half of the comment period. Thank you.	The Navy regrets the lack of website functionality. To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Balaban-01	What you are attempting to do is wrong. It is appalling to find out that today's generation could possibly consider "taking" of marine mammals for warfare testing program. In this 21 <sup>st</sup> century that we live in this option should not	This comment has been duly noted.

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	even be brought up for discussion. This will impact the entire ecology and will contaminate our water, soil & air. I urge you to stop this once and for all. This is unacceptable and unrealistic. Listen to the outcry of the people and do not proceed with any kind of high-frequency active sonar sources, explosive detonations or any kind of testing you have in mind.	
Balse-01	I completely oppose to this N.W. Training Range Complex and all future destructive endeavors performed by the Navy or any branch of military. Enclosed are petitions signed by the people of Mendocino who agree whole-heartedly. We will continue to get signatures and send them your way. Enough already w/unnecessary testing at the expense of sentient life, pristine environments, and integrity! This is hallowed sacred land of sea and we the people say NO WAY!! To your tests!	This comment has been duly noted.
Balse-02	[Pacific Coast Ocean Sanctuary Petitions with all 72 signatures have been included in Appendix H.] Pacific Coast Ocean Sanctuary Petition To President Barack Obama: Whereas the West Coast of the United States of America finds itself the target of a US Navy training range expansion, offshore oil and gas lease sales by the Interior Department's Mineral s Management Service, and Federal Energy Regulatory Commission hydrokinetic energy pilot projects; Whereas the Northwest Training Range expansion would transform our peaceful coast into warfighting asset, bringing the conflict in South Central Asia into our front yard and cause significant and permanent disruption of fisheries and marine life, decimate our tourism economy and ruin our quiet enjoyment of the ocean; Whereas oil and gas drilling on our outer continental shelf would create decades of acute environmental risk and permanent deterioration of the quality and integrity of the marine environment for only a few weeks of national petroleum consumption; Whereas FERC has rushed into the business of granting hydrokinetic permits on a case by case basis with no regard for due process and objective rulemaking, and the environmental impacts of wave buoy array deployment are unknown, and would require significant industrial development onshore which is being ignored in its permitting process; Whereas: The cumulative impact of these projects are not considered by any of these agencies and would militarize and industrialize our coast to a vast extent in undesirable ways with which we profoundly disagree; Whereas: We the people, our needs our feelings, our unique culture, economy and ecology are being ignored by the federal government in	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	pursuing these projects; We, The Herein Signed West Coast Voters Urgently Insist You Postpone All These Projects indefinitely for further study as Bush 41 postponed OCS lease	

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	sales off California in 1989.	
	Further we ask you to work with Congress to promulgate Ocean Sanctuary legislation to permanently protect coastal areas off California, Oregon and Washington in order to preserve for posterity significant natural characteristics such as deep ocean upwellings which provide a large portion of the nutrients on which our fisheries and planet depend.	
Bargreen-01	First, we would like to thank you for your service to our country, and for allowing affected citizens to comment on your proposed plans. The Navy has always been a good and cooperative neighbor in the San Juan Islands, and we understand that a certain amount of jet noise is unavoidable if you are to continue doing your jobs well.  However: the new proposal to double the number of training flights over the San Juan Islands has caused serious concern for us, our family and our neighbors on Lopez Island.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
	First of all, we don't understand the necessity for doubling the training flights: has the base suddenly doubled its population of pilots?	
Bargreen-02	Second, we don't understand why more of the training flights can't take place on simulators instead of wasting vast amounts of fuel in expensive airplanes and annoying/endangering all the neighbors and wildlife beneath you.	Regarding the use of simulation, as described in Section 2.3.2.2 of the Draft EIS/OEIS, "Unlike live training, simulated training does not provide the requisite level of realism necessary to attain combat readiness, and cannot replicate the high-stress environment encountered during combat operations. Aviation simulation has provided valuable training for aircrews in specific limited training situations. However, the numerous variables that affect the outcome of any given training flight cannot be simulated with a high degree of fidelity. Landing practice and in-flight refueling are two examples of flight training missions that aircraft simulators cannot effectively replicate."
Bargreen-03	Third, why can't more of the training flights take place over open water, instead of over land? This would not only reduce the noise, but also the danger to people and wildlife below, in case of crashes or fuel dumps. You are right next to extensive waterways. You don't need to buzz the islands.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
Bargreen-04	Fourth, what about the issue of those fuel dumps that would presumably be doubled if you double flights? Orcas, eagles and other wildlife are already under threat of extinction from mankind's changes in their environment. Adding extra layers of noise and pollution is a step in the wrong direction, not the right direction. Jet fuel is exceedingly toxic, and the San Juans environment is highly sensitive.  Please reconsider these plans to expand the sorties. We feel very strongly about this.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Bates-01	The noise of these aircraft already exceed healthy levels. Life here is intolerable because of the noise which drowns out normal conversation (one has to stop talking when a plane flies overhead because a human voice cannot be heard), music: the planes are so loud that one cannot hear music being played in a set of head phones. The level of this noise is physically harmful to humans. And it is not localized; they spread it over Anacortes,	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.

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	Washington Park, Guemes, Lopez Island and Deception Pass Park, where	
	people seek quiet and tranquility and is a sanctuary for wildlife.  This airport is too close to populated areas and a very unique, scenic, and special natural area. It should be relocated to Attu where the Navy has built an extensive community. It is isolated and unpopulated. They can make as much noise as they want over the Pacific Ocean. These planes fly as late as 2AM and there is CONSTANT noise all night long from maintenance which disrupts normal and healthy sleep patterns. This base is literally robbing the public of sleep and their hearing. It is NOT the sound of freedom-it is the sound of war. It does not protect the peace-there is no peace here: it is a war zone.  This base is nothing more than government welfare that destroys the quality of life while pretending to support the economy. It is a false economy based on free taxpayer money. Planes basically fly in circles, going nowhere, wasting precious fuel when they could substitute simulators for training. The Navy is the epitome of arrogance in disrupting and destroying the natural environment and the health and well being of the citizens in the region. Further arrogance will be forthcoming when these suggestions and criticisms are ignored and the Navy will do what it pleases.  At the very least the base should reduce its operations, limit its noise and its	
	use of airspace to that over Oak Harbor, the city of people who create the noise and claim to benefit from the base's existence.	
	My message to the Navy at Whidbey NAS: SHUT UP AND GO AWAY!!!	
	Cc: The Honorable Representative Rick Larsen	
	The Honorable Senator Patty Murray	
	The Honorable Senator Maria Cantwell	
Bear-01	At a time when our oceans are in trouble (the continent sized island of plastic in the North Pacific) our fishing industry all but gone, is it necessary to further endanger the marine life off the coast. When the Navy is not allowed to operate sonar in an area where humans are in the water, that suggests a high degree of danger to life over all.	This comment has been duly noted.
Beck-01	I am opposed to the NW training range complex EIS on the basis of good science. The Navy's proposals are toxic and dangerous to the marine environment, toxic and dangerous to marine mammals and birds, and toxic and dangerous to human beings. You ought to be ashamed of yourselves, wasting my taxes on insane proposals such as planting mine fields in the ocean. Absolutely opposed.	This comment has been duly noted.
	For your information: Your website did not allow me to submit my comments. I wonder why.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Beck-02		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could

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		be submitted by mail postmarked no later than the closing date.
Belford-01	This letter is to let you know that we are vehemently opposed to the Navy's plan to test weapons in waters off the North Coast.	This comment has been duly noted.
	This is a dangerous plant that will affect our waters and marine mammals. Your analysis contains false, misleading, and out dated assumptions.	
	We need to save our planet, not further destroy it.	
Bogley-01	I'm writing to oppose expansion of testing along the coast. No sonar, no bombs, no more disruption to marine mammals.	This comment has been duly noted. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	I have been a vessel Captain and vessel owner continuously since 1962. I have fished for Salmon, Tuna, Shrimp, Crab (Dungeness, Tanner, King), and Groundfish including Pacific Whiting and Alaska Pollack. The waters I have fished are Bering Sea. North and South Pacific, Caribbean, North and South Atlantic, and The Southern Ocean of Chile and Antarcticaas a captain of vessels from 32 feet to 340 feet.	There have been no documented instances within the NWTRC of U.S. submarine entanglement in fishing gear, causing damage to the fishing vessel. In the case of an incident as described, fishermen can make an admiralty claim for reimbursement for any damage.  Effects to fish from the proposed action was addressed in Section 3.7 of the Draft FIS OFIS
	I was one of the first participants in pioneering the American effort of establishing the Pollack and Whiting fisheries in 1979, after the Magnusson-Steven's fishery and management act was passed.  I have a BS in science with some post-graduate work in Oceanography from Oregon State University in 1966.  During my continuous fishing career I have been an Asst. Professor of Fisheries at both OSU and The University of Alaska in their Sea Grant Programs. I have also been very active in Fishing Organizations for over 45 years, either serving on the board or as an officer, VP or PresAs such I took part in lobbying and regulatory efforts in Washington DC and all of the west coast states including Alaska. I served as an industry advisor to the US State	the Draft EIS/OEIS.  Concerning the comment about interference from Navy ships or exclusions:
		The activities of the proposed action take place in the same area and at approximately the same level as they have for decades. The fishing industry can expect no noticeable change in their level of interaction with
Bohannon-01		the Navy in the NWTRC.  There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
	Dept. on Treaty matters in both the North Pacific and Bering Sea, negotiating in the US, Canada, Korea, Japan, and The Soviet Union. I have served on several committees of the fishery management councils.	Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with
	I have a concern that the US Navy's proposed Northwest Training Range Complex has the potential to seriously interfere with several fisheries on the Oregon and WashingtonSpecifically the Pacific Whiting Fishery.	representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section
	The US Fishery:  Started in 1979 and, Takes place from April to December	3.14.2. The proposed project would temporarily instrument 25-square-mile or smaller areas on the seafloor.
	<ul> <li>Covers an area from Fort Bragg, California to Cape Flattery, Washington from 25 fathoms to 400 fathoms</li> </ul>	
	<ul> <li>Includes;</li> <li>37 catcher vessels, 85 to 150 feet long delivering to shore plants.</li> </ul>	
	<ul> <li>15 shore plants in the communities of Eureka, Crescent City, Coos Bay, Newport, Astoria, Ilwaco, and Westport.</li> </ul>	

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	<ul> <li>24 catcher vessels 85 to 150 feet long, delivering to at sea processorsMotherships.</li> <li>5 Motherships, from 250 to 630 feet long.</li> <li>10 catcher/processors from 250 feet to 350 feet long.</li> </ul>	
	There are a total of 91 vessels, with approximately 1700 personnel aboard. The shore plants have another 1500 personnel. Most of the time the fishery is spread out and each individual fleet is working together. There are other times that the fish are concentrated in one area and most of the fleet is on this spot. When fishing, each individual fishing boat, whatever their size, has 3 times the depth of water they are fishing on, of trawl wire behind the boat toward the bottom. They also have a net that measured with the bridals is another thousand feet. The net and its related gear have a value of up to one million dollars on some vessels. All of this means that things get crowded and that vessels fishing deep water can have over a mile of gear that they are managing very precisely and carefully, in three dimensions. That is also why a Trawler has one of the highest hierarchies in right of way over other vessels. We are somewhat "restricted in our ability to maneuver". It also should be emphasized that when the fleet is together at close quarters (<.1 nm) and have their nets deployed in deep water, that a submarine would be hard pressed to maneuver through the fleet. I had the experience of having a sub go through my net when I was basically alone, in Bering Sea and in heavy weather. The boat turned sideways and was towed stern first for a short time until the sub broke free through the wings of the net. It cost us a day's fishing and extensive repair to the net. I feel that we were lucky because nobody was hurt and the vessel was still afloat. I don't know if it was one of ours or theirs!	
	The fishery is very valuable to the coastal communities. In 2008 the Whiting fleet caught approximately 270,000 metric tons (595,242,000 lbs) of fish. This equates to over 60 million dollars to the vessels, and over 250 million dollars to the processors. When an economic multiplier (x6) is applied, the value to the coastal community is over 1.5 billion dollars.	
	The value of vessels and gear is also high. A recent factory trawler sale was for 170 million dollars and a recent catcher vessel sale was for 35 million dollars. Maintenance and equipment costs are also high. Most of the vessels were built and are maintained in US shipyards and the supplies are bought locally. All of this is important to the local economy.	
	The fishery is also very sensitive to loud detonations and disturbance. We found this to be true when the oil exploration was going on off the West coast and in the Bering Sea. After the disturbance the fish scattered and became wary and it was difficult to find any concentration of fish. In my experience this has been true of all species of rock fish, Pacific Whiting, Alaska Pollack, Salmon, and Tuna. The fisheries are difficult enough as it is without adding something else to the mix. We have experienced that our own less powerful, less noisy, and less sophisticated sonar after too much use around a particular fish school, tend to educate the fish to our presence and make them very wary, hard to catch, and sometimes disperse and disappear. By experience, we know that acoustic signals affect fish behavior, both from the	

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	sonar and the fish finder/depth sounder.	
	If the NTRC is implemented there is a potential problem for the Whiting fishery, if we are interfered with by either exclusion and or interference. I personally feel that we can work this out, together. We need to have a working liaison between the US Navy and the Whiting Fleet, both on shore and at sea. We all have AIS systems and modern sophisticated electronics on our vessels and are used to working at close quarters with other vessels, in heavy weather, fog, and at night (we fish 24/7).	
	Another fishery that should be mentioned here is the Albacore Tuna fishery that takes place from May to November. There can be up to 1000 vessels, fishing from Cape St. James in Canada to the Channel Islands in California. Off the Oregon and Washington Coasts, the fleet fishes from 20 miles to over 500 miles offshore. I believe that they too should be contacted as they may have or create similar problems.	
	<ul> <li>It would be optimum if we could:</li> <li>Inform each other of our positions and size of fleet working and the intention of each</li> <li>To steer you away from large concentrations of fish and fishing vessels.</li> <li>Inform you of marine mammal sightings</li> <li>And work together during the fishing season to solve any other problems that arise.</li> </ul>	
	I also believe the US Navy's mission and training are very important to our country and know that my fellow fishermen feel the same way and will do their best to make things work.	
Bortnick-01	I am opposed to an increase in Naval activity over Oregon, at the Oregon coast, or in the Pacific Ocean.  At a time when the people of the world are scrambling to clean up the oceans, counter global warming, reduce chemical emissions, eliminate toxins from our air, soil, and water, revive declining species, stabilize economies, redirect priorities toward sustainability and convene peace throughout the world, this move to expand activities and the area for naval training is contraindicated.	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex or training areas over Oregon, but seeks to continue training in the same area as they have since World War II.
Bortnick-02	The Navy has not indicated, nor do they have a means to collect and dispose of the enormous amounts of waste from the ocean, air, and waterway that this increased activity will produce. Expended shells, heavy metals, toxic materials, and airborne particulates of unknown size and substance will accrue indefinitely if this proposed project goes through. Furthermore, there is no mention of substances comprised of nanomaterials and nanoparticles, which the Navy may be using in their munitions exercises or adding to jet fuel or unmanned drones. There is increasing scientific evidence that these substances are deleterious to biology and volatile in their behavior once released to the environment.	The complete analysis of the potential effects of expended materials is described in the Draft EIS/OEIS Section 3.3 – Hazardous Materials and Section 3.4 – Water Resources.  The Navy's activities do not include the use of any nanomaterials or nanoparticles.
Bortnick-03	The Navy mentions that they have concluded that there is no adverse risk to humans from a number of sources, without proof. One of these is noise from	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to

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	overhead aircraft. The coast and the Coast Range Mountain is currently a	continue training in the same area as they have since World War II.
	peaceful place, void of the noise of overhead aircraft, jets or drones. Many of us have made our homes here because of this relished lack of noise and uninterrupted quiet. Loud noise creates stress in the body so it is untrue that no physical affect would accompany overhead aircraft.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
		All of the flight activities analyzed in the NWTRC EIS/OEIS in the vicinity of Oregon are conducted in warnings areas that begin at 12 nautical miles from the coast.
Bortnick-04	The Navy also states that there is no adverse effect from radiowaves, yet do not state the location of transmitters, number of antennas, frequency, type of waves, amplitude or duration of use. From land-based transmitters or ship radar pulsed microwave radiation has been shown repeatedly to cause	The analysis of potential impacts from radio waves was included in Section 3.16.6 of the Draft EIS/OEIS. Due to the Navy's safety precautions and safety history, the analysis did not warrant a closer look at details as described in the comment.
Dolanok o r	adverse biological effects to humans, birds, and trees. Up until 1982 Zorach Glaser catalogued thousands of such studies for the United States Navy. The draft EIS also fails to state the decibel level, frequency, and distance of aircraft and drone transmitters, if any.	The Navy has been operating similar systems for decades with no documented history of harm to humans, birds or trees. The safety precautions employed by the Navy have been proven successful and will continue.
	The Navy failed to deliver adequate notice to the Oregon public, about their plans. They gave insufficient time to coastal residents to learn of the Navy's proposal or to review the Environmental Impact Statement. Insufficient at the coast and absent for inland residents, who will be impacted by such a project. This failure is illegal according to US law.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Bortnick-05	It seems that the Navy has attempted to override any meaningful public review process of such a major undertaking and thus provide themselves with a blank check to exploit Oregon's coast, land, marine life, and air and disturb our tourism, economic base and pristine coastal beauty.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		An additional meeting was held in Tillamook, OR on February 26.
		The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.
	I would like to submit Alternative 3 to the Navy's Enhancement proposal: The Peace and Clean Oceans, Marine Animal Preservation and Enhancement Alternative	As stated on page 1-1 of the Draft EIS/OEIS, "The Navy's mission is to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the
	Whereas "The Navy cares for the environmentthe ocean is our home and protecting the maritime environment is not rhetoric – it is our life blood."	seas."  Any other proposed missions go beyond the scope of this EIS/OEIS.
	Whereas the Navy has a "critical role in protecting the ocean's highways and the global economy it serves." <sup>2</sup>	
Bostnick-01	Whereas 90% of trade is carried by the maritime shipping industry	
	Whereas 1.3 billion metric tons of goods travel through maritime shipping—about 75% of total U.S. trade	
	Whereas \$1.1 trillion worth of goods are imported to and exported from the United States through maritime shipping <sup>3</sup>	
	Whereas 90% of all marine debris is now plastic <sup>4</sup>	
	Whereas the world's post consumer plastic trash from the goods, which travel the ocean's highways are collecting in the Central Pacific Gyre creating the	

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	Great Pacific Garbage Patch (GPGP) now two times the size of France and	
	growing daily	
	Whereas 1 million birds and 100,000 marine mammals die in the GPGP each year <sup>5</sup>	
	Whereas the Albatross and Hawaiian Monk seal are close to extinction due to the GPGP <sup>6</sup>	
	Whereas Dead Oceans are increasing along the Northwest Pacific coast of the United States	
	Whereas whales are committing suicide rather than live with the unbearable disturbance of sonar	
	Whereas an increasing number of birds are found dead, starved to death along Oregon's shores due to lack of food	
	Whereas the U.S. has fewer adversaries yet maintains greater military might than the history of the world has ever seen	
	Whereas the world cannot afford war economically, spiritually, or ecologically	
	Whereas it is the responsibility of the Navy not only to see the clear passage of goods through the seas, but to make sure the goods do not become trash in the oceans, a hazard to wildlife	
	Therefore, let it be resolved that the Navy will undertake a peace and massive ocean clean-up signing party and project, where it will endeavor to engage the maritime forces of friendly and formerly adversarial nations in an indefinite peace and brotherly love, clean oceans contract. The first task will be to clean up the Great Pacific Garbage Patch in the doldrums and rescue and revive the strangled seals, turtles, birds and fish. Future projects will be undertaken as recommended by a consensus of environmental organizations.	
Bourcier-01	I oppose the Navy taking over the Air Force practice range off the Oregon coast for training that includes setting mines, sonar, and missile launches, among many other destructive things.	As described in Chapter 2 of the Draft EIS/OEIS, the Navy's proposed action does not include taking over the Air Force practice range off the Oregon coast. Navy use of these areas (designated as W-570 and W-93 on charts) is approximately 15 percent of their total use (85 percent is by Air Force and Oregon Air National Guard). These ratios are expected to remain constant throughout the range of Alternatives.
Bourcier-02	The Navy's practice sorties will severely and negatively affect the already struggling Oregon coast economy – certainly a horrible environmental impact. For example, the tourist economy will go further downhill; who will want to vacation near military exercises?	The potential economic impacts of the Navy's proposed action were described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries.
Bourcier-03	In addition, the whale watching industry will be hit hard both because whale watching charter boats will be periodically stopped and because the whales themselves are going to be reduced in number due to the use of sonar.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating

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		broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Bourcier-04	The fishing industry is going to be negatively affected in the same way. Without the fishing and tourist industries, the Oregon coast will experience massive unemployment and loss of property value. We already have these problems. Please do not make the situation worse by conducting training exercises off the Oregon coast.	The potential economic impacts of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries.
	(Handwritten on Comment Form) FYI-your email comment procedure wouldn't accept my e-mail.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Bourcier-05		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Brickner-01	This is unnecessary and will do much more harm than good. We will have real national issue that need our attention and energy. The northwest coast of our country does not need and would not benefit from being militarized by the U.S. Navy. Please put a stop to this harmful and wasteful plan.	This comment has been duly noted.
Bridson-01	I'm writing to ask you to not expand testing along the OR, WA, and CA Coast!	This comment has been duly noted.
Broderick-01	We vote NO on Navy warfare testing program in our ocean. Stop poisoning all of us.	This comment has been duly noted.
Broderick-02	Please stop contaminating our ocean. No more testing/dumping chemicals killing our ocean.  [Two newspaper articles follow.]	This comment has been duly noted.
Caldwell-01	The public comment period gives the public a minimum of 45 days (Dec 29,2008 through February 11,2009) in which to comment on the analysis presented in the draft EIS /OEIS (environmental impact statement and overseas environmental impact statement) We first read about the Navy's meeting in the evening Daily World newspaper from Aberdeen, Wash. On Wednesday, January 28,2009. A copy of the article is enclosed.  The article states that the first of two meetings would be at the Pacific Beach, WA fire hall that very day starting at 5:00 p.m. for information sessions and 7:00 p.m. for public hearings. By the time most citizens would be arriving home from dinner and reading their evening paper the meeting would be in progress and half over. I attended the well prepared meeting with Naval personnel and their consultants at Grays Harbor College the next evening on Thursday, January 29, 2009.  The information was overwhelming, so I made every effort to understand and comprehend what was being stated by the different stations and personnel.  [Article follows first page of letter]	Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. The same advertisement you describe, publicizing the meeting locations, dates, and times, ran in the Daily World on 5 separate dates; December 30, January 16, 26, 27, 28, and 29.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

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Caldwell-02	My core reason for attending is my concern for all life in our Pacific Northwest and all life in the ocean around the world.  If National Security is the primary focus of the Navy, then by now the Navy realizes that the world is a mirror and they (the Navy) will receive back the processes put in action in the environment.  My concern is that the level of harm and death to marine animals will be accelerated exponentially with the addition of Alternate I to the existing level called "no action alternative".  Alternate 2 will not only include the existing "no action alternative" but include and implement range enhancements, adequately support the need for new ships, aircraft, and new undefined weapons systems and participate in joint (multiservice) events here and all over the world.  My concern is for environmental practices all over the world, as this is also an Environmental impact statement for overseas?  Then I read that recent scientific and technological advances are only applied toward analyzing potential environmental effects. This means analyzing after an effect. In simple terms "after the destruction" or loss of marine life or whatever the destruction may be.  Implementing the existing protective measures of the 24/7 observers is an attempt to mitigate the damage, but deep down the Navy knows how powerful intense sonar can and will destroy life and is no match for the 3 24/7	The Navy shares your concern for marine life. As described in the Draft EIS/OEIS, the Navy implements protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Caldwell-03	observers with 24/7 observation are unable to see marine life when the submarines are submerged. The very sonar (all levels) that the navy may use may be the same frequency of sonar that marine animals use and this level may be so magnified that all life forms in its range are damaged or destroyed. The Navy does not know the results of increasing the sonar level and intensity of its activities here and around the world. The Navy does not know how developing an additional land-based electronic combat threat signal emitter along our coast will impact the marine environment.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Caldwell-04	My husband and I are both concerned after reading further under "Potential Effects to the Human Environment" that there is the potential for economic impacts to commercial fishing from use of the portable undersea tracking range and underwater training minefield. Knowing this, why would the Navy	The potential economic impacts of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel

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	undermine the very industry that supports them with food? How can you not know that these actions will bring consequences?	traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries.
	Even in your brochure, the Navy writes that the underwater world of marine mammals is complicated and difficult to survey. There is still much to learn about how marine live, travel and respond to human activities in the ocean. "Do No Harm should be priority # one.	
	In looking at the very fine Figure 2 in your brochure (Puget Sound Training Areas of the Northwest Training Range Complex) I see where underwater detonation range (black dot) and the detonations training range (red dot) are placed.	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes."
	With so many earthquakes in the last few years I contemplate if there have been unknown and unforeseen geological damage that could have resulted from underwater detonation training?	(http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&n extRow=next)
	The Puget Sound is laced with all kinds of geological faults and of course the big one – Juan De Fuca is a subduction fault. Our recent earthquake was just off of Keystone. Is there any unknown possibility of a connection between detonation in unstable areas?	
Caldwell-05	My last concern is that the Navy's EIS/OEIS was started on the previous administration in July 31, 2007. There was a huge amount of time that lapsed with many events in between that transpired. Who would have guessed how our economy would be presently? So my concern is, that the public was not given ample time to respond to the first meetings in Sept 2007 and also not delayed in the information getting out for the response back or so quickly and later in the 60 day comment period, like this time.	
	I thank you for taking the time to have this meeting. Thank you for having such well informed personnel that were very patient with my learning curve.	
	We are all in this event called "life" together, so in the name of National Security, let us all have a conversation like never before. Let us truly listen to each other. Let us learn from one another and hold sacred the very planet that supports all LIFE.	
	Love and Light	
Cameron-01	I am opposed to any Navy training activities on the Oregon Coast. I do not see how the price of the harm to our peaceful coastline & its beauty is worth what the navy needs to do.	The Navy's proposal is designed to accommodate the necessary training while minimizing impacts to marine life using the best available science, as discussed and analyzed in this EIS/OEIS.
Camp-01	Sonar used in research, training, navigation, weaponry, and for all other purposes is known to have unfortunate (sometimes fatal) effects on marine mammals. Please stop the use of sonar in any area where the sonar can effect whales and other marine mammals.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Carter C-01	I am writing to strongly object to the proposal to increase operations at NAS on Whidbey. We live on the south end of Lopez Island and are often disturbed by very loud, low flying jets over our home. These occur both day and night. We moved her to get away from noise and traffic. We want fewer flights over Lopez, not more! They bother us, our neighbors, our ducks and chicken and even the wildlife. When they fly over, we feel as though we are	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.

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	in a war zone being attacked by our own military.  Please be considerate of your neighbors and limit the flights over places where people live.	In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Carter S-01	Here we are on Lopez Island, quietly tending our sheep- When suddenly, when least expected, the full sound and fury of techno-industrial war machinery interrupts our idyl.* Not only is this Grand Kabuki of the Macabre enormously ineffective at quelling Pashtun wedding parties-it disturbs my ducks.  *That's "idyl", not "idol", and not "idle".  (See drawing attached)	This comment has been duly noted.
Charnes-01	The public which you are supposed to protect has not been informed of these experiments and their potential hazards. The citizens of this democracy have a right to make an informed decision as to which practices are too great of a detriment to our environment and future to be implemented.	The purpose of the Draft EIS/OEIS is to inform the public so that they can learn about the proposed activities. The Draft analysis and all public comments were then used to develop this Final EIS/OEIS to inform the decision maker before a decision is made as to the type and level of training activities to take place.
Chowning-01	I would like to urge the U.S. Navy <u>not</u> to increase training activities on its NW Training Range Complex. Please complete a more comprehensive report on environmental impacts and look for alternatives that are not detrimental to marine mammals nor a priceless ocean area. Thank you. P.S. I know I have many friends who agree with me who are not writing. I'm not a lone voice.	The Navy feels the Draft EIS/OEIS was a very thorough analysis of impacts that could result from the proposed activities.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Ciecko-01	As a resident of western Skagit County my primary concern is aircraft noise. Based on past experience I do not think that the conclusion that aircraft noise in the OPAREA which covers much of Skagit County is non significant. The claim that the aircraft noise is intermittent is not always the case. My own experience is that on some days the noise from aircraft coming and going is almost continuous. This has been especially true at night on some occasions. The Navy is well aware that aircraft noise has generated many complaints in Skagit County over the years, yet does not discuss this in the EIS. Also I do not believe that the Navy follows its procedures to mitigate this noise as stated in section 3.5.4.1. We have not been contacted later by the ombudsman when we have called in complaints. Based on my personal observations and discussions with neighbors it seems that at some times the planes are being flown in a manner which maximizes the noise levels. Finally, I do not think Skagit County has been fairly considered in this process. No public meetings have been held in this county, nor are the documents available at libraries in this county. The EIS refers to working with Oak Harbor and Island County planners. It seems that the same attention should be	The only training area of the Northwest Training Range Complex that falls within Skagit County is the Darrington Operating Area, with a floor of 10,000 ft. Since aircraft operate here at altitudes above 10,000 feet, this is unlikely the cause of the noise described.  Four Military Training Routes (MTRs) exist in Skagit County, and involve low-flying aircraft. Aircraft flying along these MTRs are likely the source of the noise as described in this comment. These training routes are not Navy routes and are neither part of the Northwest Training Range Complex nor the proposed action of this EIS/OEIS.

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	afforded Skagit County. In talking to friends and neighbors I do not have much of a sense that the Navy has made an effort to publicize these significant changes to a large group of citizens who will be affected. Finally, in reaching the conclusion that additional aircraft noise will be non-significant in the future because it has been treated as being non-significant in the past is a convenient argument to make. This area has been growing and changing. What was acceptable in the past is not necessarily acceptable today and in the future. Isn't that one of the reasons this whole process is required to be undertaken in the first place? We deserve a recognition of the fact that the aircraft noise issue is important to many people. We deserve a comprehensive mitigation plan as part of the Navy's future operations in the Northwest.	
Cochrane-01	The alternatives offered in the Navy's proposal for expanded training in the Northwest Training Range Complex do not analyze or provide adequate protection for humans, animals and environment. I ask the Navy to rework the draft EIS to include the following modifications in all alternatives being considered:	The Navy feels the Draft EIS/OEIS was a very thorough analysis of impacts that could result from the proposed activities.
Cochrane-02	Reduce the potential for oil spills, and collisions by having all submarines on the surface to the approaches to and in the Straits of Juan de Fuca	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Cochrane-03	Eliminate all use of depleted uranium and white phosphorous by the Navy	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  White phosphorus is not used in the NWTRC and is not part of the
Cochrane-04	Ban at –sea dumping practices of the Navy-no old ammo, no petroleum, plastics, toxics, etc.	proposed activities.  Table 3.4-2 of the Final EIS/OEIS describes the current Navy policies concerning waste discharge from Navy ships.  Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships. Dumping must be authorized on a case-by-case basis by the Chief of Naval Operations (CNO) N45, is rarely requested or authorized.
Cochrane-05	Set aside from all training uses several protection zones, including 1) the Olympic coast National Marine Sanctuary 2) all inshore waters of Greater Puget Sound (including the Strait of Juan de Fuca and Strait of Georgia); 3) Lower Continental Slope waters between the 500 and 2, 000m depth contour; 4) Outer coastal waters between the shoreline and the 100m depth contour (and buffer zone); and 5) Canyons and Banks of Northern Washington State	As stated in the DEIS, and as stated in public articulations of the professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need. The analysis mandated by NEPA is not an evaluation of alternative means to accomplish the general goal of an action. Rather, alternatives to be evaluated should be those that

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	and Oregon	reasonably satisfy the specific purpose and need for the agency action.
		The underlying need is to conduct training of a specific nature, type, and scope that is required to ensure Navy personnel and units are fully trained. The DEIS appropriately limits its analysis to alternatives that meet the Navy's congressionally mandated training mission. Moreover, the Navy has proposed extensive mitigation measures to reduce any potential impacts on marine species and marine resources.
Cochrane-06	Adopt operational procedures and mitigation measures so as to make extraordinary sonic events and other impacting activities less likely disrupt whale populations  • Cease all sonar exercises in Puget Sound and Haro Strait to avoid adding stress to the resident Orcas  • Increase the size of the U.S. Navy's cetacean safety zones to the sizes of those used by other Navies  • Seasonally avoid migration routes and feeding or breeding areas  • Monitor for marine mammals one hour before training begins  • Reduce sonar power or suspend sonar activities during times of low	The proposed action does not include sonar training within the Strait of Juan de Fuca, Puget Sound, or Haro Strait.  Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal Protection Act. The Navy has initiated consultation under the ESA and applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine
	Visibility, when whales are hard to spot     Use of sonar and other noise-emitting activities at the lowest practicable sound level     Increase the volume of active sonar gradually to give nearby marine mammals a chance to flee.	mammal location over time within the NWTRC, operational variability on Navy mid-frequency and high-frequency active sonar operations, and to fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Cochrane-07	Set up hydrophones throughout the Sound for public access	As stated on page 1-1 of the Draft EIS/OEIS, "The Navy's mission is to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas."  Construction of hydrophones for the purpose of public access would provide no value in accomplishing the Navy's mission and goes beyond the scope of this EIS/OEIS.
Cole-01	I am writing to demand that the killing (what you call "taking") of marine mammals for your Pacific Ocean Warfare testing program be stopped immediately!  What the military is doing is insane. Killing peaceful sentient beings is utterly beyond rational thought. Certainly with all of the technological advancements in the military sector you don't need to be killing anything to advance your warfare training.  STOP KILLING PEACEFUL SENTIENT MARINE MAMMALS!!  Kimberly,  Please forward this letter to the highest commanding officer. Thank-you.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either level A or level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. As described in Section 3.9 of the Draft EIS/OEIS, the Navy does not expect to cause serious injury or death to any marine mammals.
Collier-01	Coos Bay/North Bend is the largest area on the coast. We did not get a public hearing, nor is there a copy of the EIS in our local library.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population

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	This is wrong. We need a public meeting so we know what is going to happen & how it will affect us.	centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F. Finally, the Draft EIS/OEIS has been available for download since December 2008 from the NWTRC EIS website at: http://www.nwtrangecomplexeis.com
Columbia Gorge Audubon Society (Columbia Audubon)-01	We have grave concerns about this proposal: (1) Impacts are not properly or sufficiently analyzed, (2) It appears damage to marine life is underestimated,	The Navy believes the analysis in the Draft EIS/OEIS is very thorough and that the analysis accurately portrays the potential effects to marine life.
Columbia Audubon - 02	(3) the cumulative impacts are inadequately analyzed,	The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.
Columbia Audubon - 03	(4) inadequate mitigation is apparent.	The Navy and the National Marine Fisheries Service (NMFS) collaborated on the mitigation measures proposed in the Draft EIS/OEIS. The Navy believes these measure are very effective.
Columbia Audubon - 04	These special areas of biological concern need to be protected:  (1) Inshore waters of Greater Puget Sound Straits of Juan de Fuca & Georgia, (2) Lower Continental Slope water between 500 & 2000 m in depth, (3) outer coastal waters from shoreline & the 100 m depth contour (& buffer zone), (4) canyons & banks of N. WA. State & OR., & (5) The Olympic Coast National Marine Sanctuary. Our marine fisheries have been about sacked, it is not a good idea to now make war on this fishery. When the fishery is gone, history will look back and note this proposal as one of the many causes of the decline & fall of the fishery. It is time to stop, reflect, look at the bigger picture, & start the repair. We oppose any increase of damage to the fishery & marine animals, we support the long haul to recovery, NO ACTION, PLEASE.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Consortium for Ocean Leadership (Consortium)-01	The purpose of this comment is to introduce the Ocean Observatories Initiative (OOI) project to the U.S. Naval Facilities Engineering Command Northwest with respect to the Navy's Northwest Training Range Complex EIS/OEIS and NAVSEA NUWC Keyport Range Complex EIS/OEIS. The Consortium for Ocean Leadership is the lead management organization for the proposed installation and operation of the Ocean Observatories Initiative (OOI) Network. The construction of this ocean observatory will be funded through a cooperative agreement between Ocean Leadership and the National Science Foundation (NSF), with funding from the NSF Major Research Equipment Facilities Construction (MREFC) account. The OOI Project is managed by Ocean Leadership (OL) in collaboration with academic-based Implementing Organizations: the University of Washington, Woods Hole Oceanographic Institution, University of California - San Diego, Oregon State University, and Scripps Institution of Oceanography.  Overview of OOI  To provide the U.S. ocean sciences research community with the basic	The Navy appreciates the information provided and has included it in the Cumulative Impacts section for analysis.
	sensors and infrastructure required to make sustained, long-term, and	

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	adaptive measurements in the oceans, the NSF's Ocean Sciences Division is	
	developing the OOI from community-wide, national, and international	
	scientific planning efforts. The OOI builds upon recent technological	
	advances, experience with existing ocean observatories, and lessons learned from several successful pilot and test bed projects. The proposed OOI will be	
	an interactive, globally distributed and integrated network of cutting-edge	
	ocean observing capabilities. This network will enable the next generation of	
	complex ocean studies at the coastal, regional, and global scale. The OOI is	
	a key NSF contribution to the broader effort to establish the proposed	
	operationally focused national system known as the Integrated Ocean	
	Observing System (IOOS). As these efforts mature, the research-focused	
	observatories envisioned by the OOI will be networked to become an integral	
	part of the 100S and in turn will be a key and enabling U.S. contribution to the international Global Ocean Observing System (GOOS) and the Global Earth	
	Observation System of Systems (GEOSS).	
	The OOI infrastructure will include cables, buoys, underwater vehicles,	
	moorings, junction boxes, power generation (solar, wind, fuel cell, and/or	
	diesel), and two way communications systems. This large-scale infrastructure	
	will Support sensors located at the sea surface, in the water column, and at	
	or beneath the seafloor. The OOI will also support related elements, such as	
	data dissemination and archiving, modeling of oceanographic processes, and	
	education and outreach activities essential to the long-term success of ocean	
	science.	
	The OOI represents a significant departure from traditional approaches in oceanography and a shift from expeditionary to observatory-based research.	
	It would include the first U.S. multi-node cabled observatory; fixed and	
	relocatable coastal arrays coupled with mobile assets; and advanced buoys	
	for interdisciplinary measurements, especially for data-limited areas of the	
	Southern Ocean and other high altitude locations.	
	Global, Regional, and Coastal Scale Nodes	
	The OOI design is based upon three main components at global, regional,	
	and coastal scales. At the global and coastal scales, mooring observatories	
	would provide locally generated power to seafloor and platform instruments	
	and sensors for data collection, and use a satellite link for data transmission	
	and communication to shore and the Internet. Up to six Global Scale Nodes (GSN) or buoy sites are proposed for ocean sensing in the Eastern Pacific	
	and Atlantic oceans. The Regional Scale Nodes (RSN) off the coasts of	
	Washington and Oregon will consist of seafloor observatories with various	
	chemical, biological, and geological sensors linked to shore by submarine	
	cables that provide power and Internet connectivity. Coastal Scale Nodes	
	(CSN) will be represented by the Endurance Array off the coast of	
	Washington and Oregon and the relocatable Pioneer Array off the coast of	
	Massachusetts. In addition, there will be an integration of mobile assets such	
	as autonomous underwater vehicles (AUVs) and gliders with the GSN and CSN observatories.	
	Environmental Compliance and Interagency Coordination	
	Environmental compliance and interagency coordination	

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	The Final Programmatic Environmental Assessment (PEA) for the OOI pursuant to the requirements of NEPA (42 United States Code § 4321 et seq.) and the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (Title 40 Code of Federal Regulations §§ 1500-1508) can be found on the NSF Division of Ocean Sciences (OCE) Environmental Compliance website:  http://www.nsf.gov/geo/oce/pubs/OOIFinalPEAJun08.pdf.This document contains a detailed description of the proposed OOI network design and infrastructure. The NSF concluded the OOI PEA with a Finding of No Significant Impact (FONSI), found on:	
	http://www.nsf.gov/geo/oce/envcomp/OOI-PEA_FinalFONSI_020309_sm_file.pdf.  We note that the OOI research facility and operations are not considered in the NWTRC Draft EIS (for instance under Chapter 4, Cumulative Effects: 4.1.3.7 Scientific Research). The northern extent of our fixed research facility lies south of the NWTR W-237A Warning Area and outside of the Olympic Coast National Marine Sanctuary. However, we note the close proximity of our observation platforms on the shelf and slope west of Grays Harbor (Endurance Array) to W-237A. Also, the observation platforms west of Newport (Endurance Array) lie close to, or within W-570. Science platforms on the cabled Regional Scale Nodes of the 001 also lie below various offshore Warning Areas. Essentially all of the OOI Endurance Array and much of the Regional Scale cabled observing network lie within the general Pacific Northwest Operating Area (PACNW OPAREA).	
	At this time, supplementary environmental analyses are being initiated to consider possible additions to the OOI proposed design as described in the OOI Final PEA. Please refer to the OOI Final PEA (Chapter 2, section 2.2 Proposed Action) for descriptions of the proposed infrastructure. The possible additions to the OOI design being considered are:  1. The addition of two moorings, paired surface and subsurface, at 500 meters depth On the Grays Harbor Line (description of the Grays Harbor Line in the OOI Final PEA, section 2.2.1.1 on page 20; also see Figure 2-1 for least in a the Crays Harbor Line and Figure 2.3 for a diagram of the poired.	
	location o the Grays Harbor Line and Figure 2-2 for a diagram of the paired moorings).  2. Undersea cable connection from the Subduction Zone (N4) of the Region Scale Nodes to the subsurface moorings at the 500 and 80 meter sites on the Grays Harbor Line (see Figure 2-8 on page 30 for the location ofN4).  3. Addition of a Global site in the Argentine Basin of the Southern Atlantic Ocean, approximate location at 42°S, 42°W (see Figure 2-13 on page 39 for a diagram of proposed mooring infrastructure).  We will continue to consult with the Navy COMSUBPAC and COMSUBGRU	
	NINE on the operation of these research facilities, per NAVSEA Instruction 4740.1 A, during the USCG PATON and JARPA permitting processes. We will also continue our coordination with NAVFAC Headquarters, Naval Submarine Cable Protection Office. Should you have any questions or desire additional information, please feel free to contact me by phone at 202-787-	

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	1604 or via email at sbanahan@oceanleadership.org. We look forward to the ongoing coordination of this ocean observing facility with Navy operations.	
Cosler-01	The Puget Sound basin is not a suitable environment for Navy sonar and explosives training because of it is an echo chamber which causes harmful effects on marine mammals, fish and sea life. Because of the high volume of boat traffic, both commercial and pleasure, the Naval training exercises with subs and ships create a hazard for navigation, create dangerous wakes for small boaters, limit access, effect fish stocks and pollute our fragile environment that many are dependent upon for survival, for work and are what makes Puget Sound a high value area for living and vacationing. The National Marine Sanctuary should also be off limits, as is intended, for the protection of the ecosystem of our NWPacific and interior waters.	This proposed action does not include training sonar use in Puget Sound. Underwater explosives training in Puget Sound occurs in three distinct locations that have been thoroughly analyzed for their potential impacts. The underwater detonation ranges were depicted on Figure 2-3 of the Draft EIS/OEIS. The analysis of impacts from these underwater detonation activities is found in the applicable resource sections in Chapter 3.
Cosler-02	The alternatives offered in the Navy's proposal for expanded training in the Northwest Training Range Complex do not provide adequate protection for humans, animals and environment. I ask the Navy to rework the draft EIS to include the following modifications in all alternatives being considered:  Reduce the potential for oil spills, and collisions by having all submarines on the surface to the approaches to and in the Straits of Juan de Fuca	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Cosler-03	Eliminate all use of depleted uranium by the Navy	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Cosler-04	Ban at-sea dumping practices of the Navy - no old ammo, no petroleum, plastics, toxics, etc.	Table 3.4-2 of the Final EIS/OEIS describes the current Navy policies concerning waste discharge from Navy ships.  Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships. Dumping must be authorized on a case-by-case basis by the Chief of Naval Operations (CNO) N45, is rarely requested or authorized.
Cosler-05	Set aside the Olympic Coast National Marine Sanctuary from all training uses	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).  Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study
		Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."

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		(i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:
		(A) Hull integrity tests and other deep water tests;
		(B) Live firing of guns, missiles, torpedoes, and chaff;
		(C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and
		(D) Anti-submarine warfare operations.
	Adopt operational procedures and mitigation measures so as to make	Mitigation measures were described in Section 5 of the Draft EIS/OEIS.
	extraordinary sonic events less likely to disrupt whale populations.	Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal Protection Act. The Navy has initiated consultation under the ESA and applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.
Cosler-06		The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Cosler-07	Cease all sonar exercises in Puget Sound & Haro Strait to avoid adding stress to the resident Orcas	The proposed action does not include sonar training within the Strait of Juan de Fuca, Puget Sound, or Haro Strait.
	Increase the size of the US Navy's cetacean safety zones to the sizes of those used by other Navies	See response to # 6 above.
	Avoid key whale habitat by putting some areas off-limits to sonar training	
	Seasonally avoid migration routes and feeding or breeding areas	
	Monitor for marine mammals thirty minutes before training begins.	
Cosler-08	Reduce sonar power during times of low visibility, when whales are hard to spot	
	Increase the volume of active sonar gradually to give nearby marine mammals a chance to flee	
	As important as training is to the Navy, I urge you to amend all of the Alternatives with the modifications above.	
Cross-01	My family owns property at the Oregon coast. I oppose any new or increased Navy activities as proposed. My concerns are:	Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal
	1) The negative effects of sonar and other activities on marine life, which	Protection Act. The Navy has initiated consultation under the ESA and

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	have been well-documented in studies,	applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.
		The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Cross-02	2) negative effects on tourism, and	The potential economic impacts of the Navy's proposed action are described in Section 3.14 (Socioeconomics) of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries. Economic impacts are further addressed within Chapter 4; Cumulative.
Cross-03	3) negative effects on fishing.	See response to #2 above.
Cross-04	I would especially like the following area to be protected: 1) All inshore waters of Greater Puget Sound (including Strait of Juan de Fuca and Strait of Georgia, 2) Lower Continental Slope waters between 500 and 2000 m. depth contours, 3) outer coastal waters between the shoreline and the 100 m. depth contour (and buffer zone), 4) canyons and banks of Northern Washington State and Oregon, 5) Olympic Coast National Marine Sanctuary.	As stated in the DEIS, and as stated in public articulations of the professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need. The analysis mandated by NEPA is not an evaluation of alternative means to accomplish the general goal of an action. Rather, alternatives to be evaluated should be those that reasonably satisfy the specific purpose and need for the agency action.
		The underlying need is to conduct training of a specific nature, type, and scope that is required to ensure Navy personnel and units are fully trained. The DEIS appropriately limits its analysis to alternatives that meet the Navy's congressionally mandated training mission. Moreover, the Navy has proposed extensive mitigation measures to reduce any potential impacts on marine species and marine resources.
	I write to strongly oppose any increase in flights from the Whidbey Is. Air base. I feel that even at current levels, the noise pollution is negatively impacting this beautiful and quiet area, the jewel of our state. We are ruining this area by using as a practice course.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training activities that would occur in the training areas of the NWTRC, which are mostly overwater or at high altitudes, for those over land.
Crowl-01	Deception Pass State park in both Skagit and Island counties is dramatically impacted by both day and night maneuvers, as are the buoys on Hope Island. Even a drift on the coastal rivers Is negatively impacted.  With a surplus of military bases, I believe the Whidbey base should be closed and the beautiful, sandy terminus of the straights of Juan de Fuca	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity, or number of flights proposed is not significantly different from the level of activity over the past several decades.
	should be added to Deception State Park.	In fact, the study on the replacement of the EA-6B aircraft predicted a

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	I will not support any elected official that supports increased flights in the islands.	13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Dalton-01	One earth- no space; paranoia= time to STOP WAR What if? Rachel Carson=Real Beauty Plastic Island-GYRE Real issue, Clean up. Sonar-hurts ears-interferes whale instinct, homing device, migration routes.  7th generation-150 years Incomplete studies Earthquakes Cumulative Impacts Noise-damages Why? Costs? BANKRUPT GOVT. Trillions vs 20% growth a year. Albion, Caspar, Westport, USall-earth Reality-Washington whales-loss? Conserve Preserve Protect ALTERNATIVE- NO PROJECT  Fish- capazone, salmon, surf fish Seals Sea lions Whales Cormorants Ducks Loss of whales-dead Krill Seaweed plankton Abalone Sea urchins Costs? Real Clean up- irreparable damage Save our pristine coast- one of last beautiful untouched, lightly used coast lines.	Your comment has been duly noted.
Danielsen-01	I have just learned that a decision is about to be made regarding the use of the Whidbey Island Naval Air Base. Apparently the Environmental Impact Statement process for these proposed changes began in the Fall of 2007 and EIS comments are due by March 11 of this year.  The nature of the changes (EA6-B Prowlers replaced with E-18 Growlers, increased number of flights, training including air-to-air missiles, etc.) will certainly have an impact on those of us living in the San Juan Islands. Yet we were not informed of the EIS process, and there have not been any meetings in this county.  At the least, I ask for an extension of time for receiving EIS comments. Ideally, I would hope we could have a meeting in San Juan County to allow discussion and to enter comments into the record.  It is hard to imagine that an Impact Statement could be taken seriously when	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training activities that would occur in the training areas of the NWTRC, which are mostly overwater or at high altitudes, for those over land.  The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity, or number of flights proposed is not significantly different from the level of activity over the past several decades.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.  To ensure the public had ample opportunity to comment, the comment

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	those who will feel the impact have not been addressed.	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	I support the No Action Alternative.  I am concerned about he potential adverse environmental effects of the expanded activities.	The Draft EIS/OEIS provides a rigorous and thorough analysis of potential environmental impacts using best available scientific data, and in cooperation with the NMFS.
	The sonar will likely affect the orcas and other marine mammals. Sonar is known to damage the ears of orcas and can result in death. I am also concerned that the underwater detonations could constitute harassment of whales protected by the ESA. Your EIS indicates that there is no data on hearing for many whale species.  I am concerned about the effect of depleted uranium and other heavy metals	Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal Protection Act. The Navy has initiated consultation under the ESA and applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.
	and toxins released into the marine environment. I am not sure there is much knowledge regarding the bioavailability of depleted uranium in this situation.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of
Dannhauer-01	In regard to the orcas, there is not much room for error—they are nearly extinct. There are also too many other health and safety concerns to warrant proceeding with these activities.	injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Department of Toxic Substances Control	The Department of Toxic Substances Control (DTSC) appreciates the opportunity provided by the Department of Defense to review and comment on the Northwest Training Range Complex Environmental Impact Statement! Overseas Environmental Impact Statement (EIS/OEIS). The EIS/OEIS addresses ongoing and proposed military training and testing activities, as well as proposed enhancements to the capabilities of the Northwest Training Range Complex.	Thank you for reviewing the Draft EIS/OEIS.
(DTSC)-01	A review of the EIS/OEIS indicates that none of the activities or potential impacts analyzed in the document appears to fall within the jurisdiction of any DTSC boards, departments or offices. As such, no specific comments on the scope or content of the EIS/OEIS are considered necessary at this time.	
	Please contact me at (xxx) xxx-xxxx if you should have any questions regarding our review of the EIS/OEIS.	
DeVincent-01	I am writing to document my opposition to any increase in more Military	Issues of military budget are beyond the scope of this EIS.

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	Action Off the NW Pacific Coast. If anything, training activity of this nature should be decreased. These are the reasons why I believe this to be the case.	
	The US Military already spends more on it's defense than all the other nations in the world combined! This is a horrifying figure that all future expenditures should be measured against.	
DeVincent-02	2. There is no current threat to this nation that warrants this kind of increase in military action off the NW Pacific Coast.	Section 1.2.1 of the Draft EIS/OEIS describes why Navy training is critical. Discussions about military funding and similar policy are beyond the scope of this EIS/OEIS.
DeVincent-03	3. The use of ELF and other "active" radar has proved harmful to sea mammals, and some of these species are already endangered. There is no threat to this nation to justify the use of such a weapon or detection system as to justify the indiscriminate loss of threatened species, or other species as well.	ELF use is not a part of this proposed action. The safety precautions used by the Navy to prevent injury to people have proven effective at preventing injury to animal life as well. The Navy is not aware of any study indicating harm to marine mammals from its use of radar.
DeVincent-04	4. At a time when our nation is being crippled by endless wars and other economic travesties, we should be scaling back on the kind of training activities that use single use expenditures, like bombs and explosives.	See response to #2 above.
DeVincent-05	5. If you want to train soldiers closer to home, then simply don't send them so far away. Cut back on the kinds of training that uses excessive amounts of travel.	The Navy agrees in the comment that it is desirable to train closer to where the forces are based. As described in Section 1.2.3 in the Draft EIS/OEIS, the ability to train close to home is what makes the NWTRC such a valuable range.
DeVincent-06	6. Given the fault lines along the Pacific Coast, is it really wise to be dropping major bombs and explosives and sending out unnatural sound waves near our coasts?	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
DeVincent-07	7. It appears the Navy can afford to spend millions on PR campaigns to brand it's activities as examples of Environmental Stewards, as it did on the website where comments were supposed to be taken. During the Bush years the Navy spent considerable energy fighting challenges to it's unchecked power to circumvent the Marine Mammals Protection Act. We must fight this kind of publicly funded propaganda designed to support increases in military activity and be aware of it when considering questions such as these.	Comment noted. Public review was not limited at any time during the comment period because comments could be submitted by mail at any time.
DeVincent-08	8. Over 50% of every tax dollars goes to support the military, which is all too often used to support corporations, where greed works against the best interest of this nation, it's inhabitants and the world. Any increase in military activity off this coast is not the best interest of anyone except weapons manufacturers.	See response to #1 above.
DeVincent-09	9. Increases of some radar activities have a much greater chance of harming the Sound and our ocean, the creatures in our ocean, which are some of our greatest resources, than helping them.	Your comment has been duly noted.
	It's time to start saying no to military escalation, both at home and abroad. It	

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	is time to stop inflicting violence whenever and wherever to whomever and whatever and forever. Our own unchecked belligerence is the biggest threat we face and it's time we faced that threat and say no to more military action in the Pacific!	
U.S. Department of Interior (DOI)-01	The U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS), for the Northwest Training Range Complex, WA, OR; and CA The Department offers the following comments for use in developing the Final Environmental Impact Statement (FEIS) for the project.  GENERAL COMMENTS  Description of Alternatives and Effects Analyses:  In reviewing the DEIS, it has been found to include many of the proposed actions found in the NAVSEA Keyport Range Complex Expansion. The action areas for these two operations overlap, and many of the actions occur [(1) on the ocean surface, (2) under the ocean surface, (3) in the air, and (4) on land] within the action area and comprise components of the other action's [training, research, development, test and evaluation (RDT&E)] activities, and equipment. The FEIS needs to show how these two actions are discrete and are neither interrelated nor interdependent, specifically in respect to effects to threatened and endangered species and designated critical habitat. If demonstrated to be discrete actions, the FEIS cumulative impact section should analyze this proposed action in conjunction with the proposed NAVSEA Keyport Range Complex Expansion.	The two actions, although overlapping, involve very different activities, Fleet training on the NWTRC and RDT&E on the NAVSEA NUWC Keyport Range Complex, respectively. Neither action depends on the other. The Navy is ensuring NEPA and EO 12114 compliance for both actions. NUWC Keyport's activities are evaluated in the Cumulative Impacts section of this EIS/OEIS, and NWTRC activities are included in the Cumulative Impacts section of the NAVSEA NUWC Keyport Range Complex Extension EIS/OEIS.
DOI-02	The DEIS refers to the nearshore marine refuges, and the Olympic Coast Marine Sanctuary; however, no mention of the Washington Islands Wilderness, a 452-acre area designated in 1970 that has restrictions on entry (200 yards) and aircraft flyover height (2000-foot floor). This area contains habitat, forage, and breeding areas for listed threatened and endangered species and species of concern. If any actions are proposed within or adjacent to the designated wilderness area, then the FEIS should include an analysis of the scope of those activities, any associated effects of those activities, and whether the activities are consistent with the purpose of the Wilderness Area.	The Washington Islands Wilderness—or Washington Islands National Wildlife Refuge—is discussed specifically on page 3.10-9 of the Draft EIS/OEIS, with respect to birds. Also, wildlife refuges are discussed in general on page 3.6-12 with respect to marine plants and invertebrates. Information on Washington Islands Refuge Complex has been added to the document section 3.10 in Important Bird Areas.  Proposed activities within and above the Sanctuary and Refuge are addressed in 3.9 Marine Mammals and 3.10 birds.
DOI-03	The proposed duration of the Alternatives are not clearly described in the DEIS. The FEIS needs to clearly show the duration of the Alternatives. It is difficult to gain a comprehensive view of all the conservation measures when they are interspersed throughout such a document. Providing a discrete section recapitulating all conservation measures proposed would allow the reviewer to clearly identify the conservation measures to be implemented. The Department recommends that a discrete conservation measure summary section be provided in the FEIS.	The duration of the activities would be indefinite, although the EIS will be reviewed after a 5-year period.  All of the mitigation measures were summarized in Section 5 of the Draft EIS/OEIS.
DOI-04	Stated throughout the document is "many of these items are inert," relating to expended items. The FEIS should clearly define what these items are and why they are inert. In addition, the FEIS needs to include an analysis of the impacts of these inert and non-inert items to threatened and endangered	Table 2-10 of this Final EIS/OEIS includes every item expended as part of the proposed action. The table now includes a designation for each item as to being inert, pyrotechnic, or explosive.  Impacts described in the Draft EIS/OEIS included description of both inert

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	species.	and non-inert items.
DOI-05	The DIES notes that in many cases that expended material including: batteries, control wires, sonobuoys, training targets, and countermeasures will be left in place. The continuous accumulation of debris from the proposed operations, especially those containing non-inert materials, could adversely affect the marine habitat, near shore, and shoreline. The FEIS recommends all Alternatives contain measures for the retrieval of equipment and debris that may result from the proposed action. In addition, an analysis of uncollected debris release of toxics into the water that may adversely affect marine species should be assessed.	The Draft EIS/OEIS described the fate of these materials in the analysis of impacts. NEPA regulations (40 CFR § 1502.14) state that the EIS shall, "Rigorously explore and objectively evaluate all reasonable alternatives"  It would be impractical, if not impossible to collect the thousands of expended items, many lying in extremely deep water. Any alternative that includes collecting expendables would therefore be unreasonable.
DOI-06	The FEIS should evaluate the potential of debris from the proposed action to wash ashore onto public beaches. Should debris from the proposed operations wash ashore; the Navy should have a contingency plan in place to retrieve the debris, especially if the debris has the potential of being hazardous to humans or toxic to animal or plant life.	This issue was discussed on page 3.16-11 of the Draft EIS/OEIS.
DOI-07	The proposed use of high and mid-frequency sonar is discussed in detail in the 2.2 Navy Sonar Systems and Acoustic Effects of Underwater Sounds to Fish sections of the DEIS Volume I. However, the expected physiological effects from high and mid-frequency sonar on the hearing and orientation of marine mammals (sea otters) and diving birds (marbled murrelet) seems to be absent in sections 3.9 Marine Mammals and 3.10 Birds, page 3.10-20. The FEIS needs to include a species-specific description (qualitative and/or quantitative) of the expected consequences associated with the use high and mid-frequency sonar to sea otter and marbled murrelet.	Hearing in birds was described in Section 3.10.1.4 of the Draft EIS. The potential for sonar impacts on birds was discussed here. The explanation for why sonar is irrelevant with respect to birds was included here and on pages 3.10-20 and 21.  Text of the EIS has been clarified to address this comment.  The habits and locations of the sea otter in the project area can be found on pages 3.9-23 through 25. Sea otters inhabit nearshore environs of relatively shallow depth (40m) with kelp beds. Sonar is typically used in transit and during training activities occurring beyond 12 nm. In addition, Navy training activities avoid otter habitats, and standard procedures restrict weapons firing near seaweed mats or kelp beds. No impacts to sea otters are anticipated to result from Navy activities.  Potential effects on marbled murrelet from mine countermeasure training is addressed in section 3.10. The Navy will continue to address effects and protective measure for this species throung ongoing consultation.
DOI-08	Birds, Aircraft Overflights,  The potential effects to nesting northern spotted owls and marbled murrelets, for low-level flights over the Darrington and Olympic MOA's along with any habitat effects to designated critical habitat for northern spotted owls and marbled murrelets, have not been assessed in this document. Overflights in the OPAREA may disturb nesting northern spotted owls or marbled murrelets due to the proposed 300-foot floor over potential nesting habitat for these species. The FEIS needs to include an analysis of the effects to these species and conservation measures including, but not limited to operational floors, and timing windows.	The response to aircraft overflight is described for all birds in Section 3.10.3.2 on p. 3.10-23 and again in 3.10.3.3 on p. 3.10-31, and in 3.10.3.4 on p. 36.  The response to aircraft overflight is described for all terrestrial species in Section 3.11.2.2 on p. 3.11-9 and again in 3.11.2.3 on p. 3.10-12, and in 3.11.2.4 on p. 14.
DOI-09	Overflights in the OPAREA may also disturb Canada lynx (Lynx canadensis) during the denning period from the proposed 300-foot floor over potential denning habitat on the Wenatchee-Okanogan National Forest. An analysis of impacts to Canada lynx needs to be included in the FEIS.	Lynx analysis has been added to the Final EIS/OEIS.

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DOI-10	The beach landings proposed to occur in the surf zone of W-237A are located within 5 miles of beaches known to be used by the threatened snowy plovers ( <i>Charadrius alexandinus nivosus</i> ) for breeding and nesting. The DEIS does not include an analysis of the suitability of the beaches in W-237A for snowy plovers, the Department recommends that snowy plover breeding or habitat suitability surveys be conducted on the proposed beaches to evaluate the risk of exposure of the Navy's activities to this threatened species and that this information be included in the FEIS.	There are no beach landings proposed in this action.
	Birds, Aircraft Collisions	As described in section 3.10 Birds, the Navy's Bird Aircraft Strike Hazard
	Under the Migratory Bird Treaty Act all migratory birds are to be conserved. An analysis of the effects of the flight activities on migratory birds due to direct impacts can be conducted using the Bird Avoidance Model created by the U.S. Air Force and/or the Federal Aviation Administration (FAA) wildlife strike database. Additional literature specific to Washington State that may be useful is Quantifying Risk Associated with Potential Bird-Aircraft Collisions Laurence M. Schafer et al. (2007).	reporting system requires that all bird-aircraft strikes are recorded. During the three years of 2002 through 2004, 593 bird strikes were recorded Navy-wide, most of which were over land or close to shore. The majority of training overflights analyzed in the EIS occur beyond 12 nm at altitudes in excess of 3,000 feet. This, in combination with the relatively modest number of total Navy bird strikes supports the conclusion that strikes resulting from strikes would not affect birds at a community or population
	The potential for bird strikes from collisions with aircraft need to be assessed in an individual and collective manner to adequately evaluate the risk for bird strikes. The FEIS should include a spatial analysis of the air space in the context of the number, duration, timing, and frequency of aircraft use in order to describe the likelihood of bird strikes for avian species in the Action Area. The FEIS should also include any measures that are proposed to minimize air strikes.	levels.
DOI-11	THE DEIS states "Navy activities in the NWTRC would not be expected to increase effects to bird populations. The sheer size of the Range Complex, as well as the temporal and spatial variability of activities, in combination with temporal and seasonal distributions of seabird species poses minimal effect potential to seabird populations.	
	Therefore no significant impact and no significant harm to birds would occur." It appears that the conclusion of this argument is based upon the premise that biological significance is measured by the low probability that Navy training activities will co-occur with seasonal avian habitat use at sea. However, no evidence is offered to support this premise. The FEIS needs to include biological evidence to support this conclusion or revise the conclusion accordingly. Additional supporting data are necessary because the reader can readily infer that an increase in activities (number, frequency, geographical extent, type or intensity, and/or duration) would reasonably increase the potential for bird strikes in the air. Therefore, information and/or relevant analysis would be necessary to reach a different conclusion.	
	Underwater Detonations	This quote was taken from Section 3.5 – Acoustic Environment of the
DOI-12	The DEIS states "Sounds of this type are produced by the kinetic energy transfer of the object with the target surface, and are highly localized to the area of disturbance. Sound associated with the impact event is typically of low frequency (less than 250 Hz) and of a short enough duration (i.e., impulse sound) that it produces negligible amounts of acoustic energy."	Draft EIS/OEIS. This section deals with airborne noises and their impacts to human receptors. The analysis of explosive and non-explosive ordnance use and its impact on other biological species is described in the applicable section of the EIS/OEIS.

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	While this may be true for a single object impacting a target or the ocean surface, there is mention of multiple projectiles of size (such as missiles, torpedoes, or other ordnance) that may be launched concurrently or in rapid succession. These impacts create cumulative sound effects, pressure waves, and SEL impulses in the water column. If multiple launch activities are planned, the impacts of multiple projectiles impacting on the ocean surface in succession should be addressed. The cumulative sound and/or pressure waves created by these activities may affect threatened and endangered species.	
	Bull Trout	Analyses of potential impacts to bull trout from underwater detonations
	The Navy explosive ordnance disposal (EOD) training includes detonations of 2.5 lbs charges of explosives or greater to disable inert mines. The primary adverse effect from underwater detonations is the generation of a pressure wave that can kill or physically injure bull trout. Two and a half pound charges are sufficient to immediately kill fish or injure individual bull trout such that they die later in time. The potential for sublethal effects should also be addressed in the FEIS because they can diminish bull trout fitness to such an extent that their capability to grow, mature, migrate, and reproduce is diminished.	are provided in the DEIS, section 3.7 Fish, pages 33, 46, and 54. Effects on bull trout critical habitat are summarized in tables 3.7-9, 3.7-11 and 3.7-13.  The Navy will continue with ongoing consultation with FWS on the bull trout and other species affected by EOD.
DOI-13	Detonations associated with EOD Training may result in mortality of forage fish important for anadromous bull trout. Mass mortality of herring and surf smelt has been documented (Teleki and Chamberlain 1978, Thomas and Washington 1998). Sand lance, another bull trout forage fish species that is common in Crescent Harbor and Puget Sound, has not been observed during post-detonation surveys by the Navy (Fish and Wildlife Service (FWS) Biological Opinion 2009). The absence of sand lance among those species recovered in mortality surveys is likely due to the absence of a swim bladder. Species with a swim bladder are more likely to float following mortality, so sand lance killed from an underwater detonation will likely not be detected during surface surveys they typically sink after dying.	
	Therefore, we recommend the FEIS assess their loss in proportion to their abundance with the mortality zone of a 2.5 lb. charge and then determine whether any population level effect would be expected (and support your conclusion with verifiable information. If varieties of larger charges (underwater detonations) are possible with any alternative, the Navy should perform a quantitative and qualitative evaluation of the effects as a function of charge size to estimate the number of individual bull trout killed or injured and whether the number killed or injured would have a measurable affect on the Coast Puget Sound bull trout population. Larger underwater detonations would be expected to have a higher likelihood of having population-level effects on bull trout or their prey resources.	
	The list of effects presented in the DEIS includes the risk of physical injury or mortality and the disruption of normal bull trout behavior associated with breeding, feeding, and sheltering. These effects, along with the conservation measures associated with each Alternative, do not support a "may affect, not likely to adversely affect" determination for these ESA-listed species. Unless additional information and/or analysis is presented, formal consultation with	

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	the FWS will be required pursuant to 50 CFR Part 402 §402.14.	
	Marbled Murrelet  The proposed underwater detonations of the EOD Training, even at the minimum charge size of 2.5 lbs, create rapid and high magnitude changes in Sound Exposure Levels (SELs) through the water that are expected to have lethal, sublethal, and behavioral consequences that may diminish the capability of murrelets to live, grow, mature, migrate, and reproduce (reduced murrelet fitness). Maintaining the fitness or the growth, survival, annual reproductive success, and lifetime reproductive success of individuals is a necessary attribute of viable populations.	The Navy's conservation measures, which include seabird surveys, are effective at detecting seabirds and ensuring that none are in the area prior to commencement of training. The Navy is confident that these surveys do eliminate potential lethal exposures to marbled murrelets, and therefore the analysis provided in the Draft EIS/OEIS is adequate. Potential effects on this species have been addressed through the consultation process.
DOI-14	Detonations that occur above water, even at a minimum charge size of 2.5 lbs are expected to have sublethal, and behavioral consequences that may diminish the capability of murrelets to forage and reproduce, reducing fitness a necessary attribute of viable populations.  The Navy proposes pre-detonation surveys to minimize marbled murrelet exposure to excessive SEL levels. While surveys may reduce potential exposure to lethal SELs, it is not eliminated by these surveys because murrelets may avoid detection by survey crews. Therefore, the FWS recommends the Navy perform a quantitative and/or qualitative evaluation of the effects for each stressor (from each activity) associated underwater detonations when the activities co-occur in space and time with murrelets and include that information in the FEIS.	
DOI-15	SPECIFIC COMMENTS  2.6.1 Revised Level of Activities, Page 2-28 "no more than two underwater detonations per year will take place at Crescent Harbor, and no more than one detonation per year at Indian Island and Floral Point for a maximum of4 detonations per year."  The DEIS states that underwater detonations will occur at 60 per year declining to four over time. The timeframes of the proposed decrease in detonation should be included in the FEIS.	Text clarified in this Final EIS/OEIS to indicate that the reductions become effective in late 2009.
DOI-16	ES 1.5.10 Birds, Page ES-26 "may affect individuals however, these activities would not have community or population level effects"  The DEIS does not contain any data that supports the conclusion that the Navy's activities will not have community or population level effects must be supported by evidence. In the case of the marbled murrelet, biological evidence collected from a variety of sources indicates the species' fecundity is not sufficient to maintain current population levels. Thus, a negative change (loss) of one, breeding-aged female may have an effect at the population level if one considers the loss of the lifetime reproductive potential of one female. Notwithstanding, other direct and indirect effects could be sufficient to result in sublethal injuries that lower individual fitness or affect the species distribution such that population level effects are measurable. The FEIS needs to include biological evidence to support this conclusion or revise the conclusion accordingly	The full analysis for impacts of the proposed actions on birds can be found in 3-10 birds.  See page 3.10-29 for analysis of impacts to marbled murrelet. Actions proposed in the EIS may affect the marbled murrelet, and the Navy will continue ongoing consultation with FWS on the marbled murrelet and other species affected by EOD.

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	Page ES-26 "Proposed No Action Alternative, Alternative 1, or Alternative 2 (Preferred Alternative) NWTRC activities would not destroy or adversely modify critical habitat for the marbled murrelet or the western snowy plover. Activities associated with any of the alternatives will have no significant adverse effect to these birds."	The Final EIS/OEIS now includes analysis of low-altitude overflight.  Text of the Final EIS/OEIS has been changed to include the following information:  "Because the training materials sink, it is unlikely that any expended
DOI-17	The potential for adverse effects to marbled murrelet critical habitat is possible from the prop wash of helicopters if hovering within 300-feet of the ground occurs. Forest stands designated as critical habitat can reach heights of 200 feet, so the wind speeds from prop wash may be sufficient to modify the existing stand by breaking limbs. If fixed wing aircraft are also used at altitudes down to 300-feet, then, depending on location, aircraft sound would also be expected to disrupt nesting birds (incubation or rearing) during the nesting season. Based on the above information the FEIS should reevaluate impacts to marbled murrelets.	materials could migrate to shore. Rare occurrences of these materials washing up on shore pose little risk to humans or wildlife. In the unlikely event that naval marine debris requiring an emergency response were to come ashore, anyone finding such materials should contact their local emergency response agency. The Navy has a long history of training in waters around the U.S. without causing health risks to the public."
	The FEIS should evaluate the potential of debris from the proposed action to wash ashore onto public beaches; specifically those that are suitable habitat for the snowy plover. Should debris from the proposed operations wash ashore; the Navy should have a contingency plan in place to retrieve the debris, especially if the debris has the potential of being toxic to snowy plover.	
DOI 40	Summary of Effects - Fish and Essential Fish Habitat, Page ES-23 Table ES-9  "Explosive ordnance use may result in injury or mortality to individual fish but would not result in impacts to fish populations. Baseline environmental conditions of critical habitat would remain the same."	As described in the Olympic Coast National Marine Sanctuary (OCNMS) regulations (15 CFR §922.152(d)(1), live bombing is not authorized within the entire OCNMS. Also, no explosives training occurs in the Offshore Area of the entire NWTRC within 3 nm of shore. EER/IEER explosive sonobuoys are not used within 50 nm of shore per Navy procedures.
DOI-18	Bull trout in the near-shore Olympic coastal marine environment have not been addressed in this document. Bull trout are known to migrate from many of the rivers and streams as far north as the Olympic National Park to Gray's Harbor. Potential effects to bull trout in relation to operations within the near shore, specifically W-237A and W-237B needs to be assessed in the FEIS.	Potential effects to bull trout from the proposed action are addressed in section 3.7 Fish.
	Inshore Area ES 1.5.4.2 Page ES-17. "None of the Proposed Action Alternatives would have long-term or significant impacts on marine or fresh water resources in the Study Area."	Potential effects of the proposed actions on water resources are addressed in section 3.4 Water Resources. Effects to other resources referred to in the comment are also addressed under appropriate
DOI-19	There is not enough information in the DEIS to support this conclusion. The use of high explosives, low overflights, beach landings, operation within the nearshore areas, disruption of migratory corridors, disruption or dispersing fish and wildlife during foraging periods, degradation of habitat, injury or death of forage species, and potential for direct injury can all have long-term significant impacts on marine and fresh water resources. A more detailed analysis of long-term impacts needs to be included in the FEIS.	sections.
DOI-20	Section ES 1.3.2 Coastal Zone Page ES-7 "For the majority of resource sections addressed in this EIS/OEIS, projected impacts outside of U.S. territorial waters would be similar to those within territorial waters. The 12 nm (22 km) distinction is simply a jurisdictional boundary and is not delineated for purposes of scheduling or management of military training activities. In	Executive Summary section 1.3.2 is specifically referring to compliance with the Coastal Zone Management Act of 1972. Coastal zone consistency determinations have been made for the states of Washington, Oregon, and California and documentation has been submitted to their respective state regulatory agencies.

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	addition, the baseline environment and associated impacts to the various resource areas analyzed in this EIS/OEIS are not substantially different within or outside the 12 nm (22 km) jurisdictional boundary."	
	The baseline biological environment within 12 nm is substantially different from that beyond. Areas within 12 nm, specifically areas of the continental shelf, provide a physical environment rich in structure and biomass for feeding, breeding, sheltering, and migratory habitat for several species protected under the Endangered Species Act, Migratory Bird Treaty Act, and Marine Mammal Protection Act. The Department believes that the resources in the two zones are substantially different. Consequently the Department recommends that separate analyses be performed for the two zones in the FEIS.	
	ES 1.5.1.1 Offshore Area, Page ES-13	Potential effects on geologic resources within the project area are
DOI-21	An analysis of the offshore geology, specifically the continental shelf out to five miles, may be prudent as this area supports a high density of wildlife including threatened and endangered species that may utilized certain geologic formations (crests, peaks, valleys, trenches, etc.) for certain aspects of feeding, breeding, sheltering, and migratory routes. This analysis should be included in the FEIS.	addressed in section 3.1 Geology and Soils of the draft (and final) EIS/OEIS.
	ES 1.5.6 Marine Plants and Invertebrates, ES 1.5.6.2 Inshore Area, Explosions, Page ES-21 and 3.6-8 - "Because eelgrass and kelp beds do not occur within the underwater detonation training areas, Alternatives 1 and 2 would not result in any adverse effects on these plants and the communities they support."	The text of the Final EIS/OEIS now includes standard Navy conservation measures to avoid eelgrass and kelp beds during EOD activities and to include the findings of the NMFS Biological Opinion indicating no impacts to salmonid habitat areas.
DOI-22	This statement is inaccurate. Surveys performed by the Washington Department of Fish and Wildlife in 2006 encountered eelgrass in patchy concentrations at or near all of the named detonation sites (EOD Crescent Harbor, EOD Floral Point, and EOD Indian Island). When assessing these actions it is prudent to remember that the entire action area (area of effect) needs to be assessed, not just the project area. Based on the 2006 Washington Department of Fish and Wildlife Survey, impacts to eelgrass beds need to be reevaluated. This reevaluation of impacts and any appropriate mitigation measures should be included in the FEIS.	
	2.6.2.5 Small Scale Underwater Training Minefield, Page 2-1 and 2-31 "These minelike shapes will be places within an area approximately 2 nm by 2 nm. Although the location for this minefield has not yet been determined, it would not be installed within the boundaries of the Olympic Coast National Marine Sanctuary"	Information concerning the actual construction of the minefield, to includ location and anchoring mechanism, would be included in follow-on NEP, analysis. The intent of the NWTRC EIS/OEIS is to analyze the potential impacts of conducting training activities on the minefield. These impacts were analyzed in the Draft EIS/OEIS. The seven proposed mine
DOI-23	Pursuant to the Fish and Wildlife Coordination Act (FWCA) of 1934 as amended, any modifications of a body of water for any purpose needs to be assessed for effects to marine life, including but not limited to threatened and endangered species. An explanation of how these dummy mines are anchored to bottom and the Navy's planned activities associated with the minefield should be provided in the FEIS. Specifically, any potential effects from the submarine avoidance exercises to threatened and endangered	avoidance exercises are not seasonal and could occur during any time of the year, at any time of the day or night.

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	wildlife that may use the area for feeding, breeding, or as migratory corridor needs to be assessed. A list of the timing windows utilized for the proposed seven (7) submarine avoidance exercises to minimize exposure to threatened and endangered species to sonar and other disturbances should be included in the FEIS.	
	Underwater Detonations, ES 1.5.4.2, ES 1.5.6.2 Inshore Area 2.4.1.5 Mine Warfare	Text clarified in Section 2.5.2.3 of this Final EIS/OEIS to indicate that the reductions become effective in late 2009.
DOI-24	(MIW) Training, Table 2-9: Current and Proposed Annual Level of Activities and other locations in DEIS - Explosive Ordnance Disposal (EOD) Ranges: "This move is planned to be completed in the fall of 2009. Two EOD Shore Detachments (Bangor and Northwest) will remain in the NWTRC. These Shore Detachments report to Commander, Navy Region Northwest and respond to regional Navy taskings and incidents. As a result of the EODMU Eleven relocation, mine warfare underwater detonation training will significantly decrease from a yearly maximum of 60 underwater detonation as analyzed in the No Action Alternative (the baseline) to no more than four annual underwater detonations as analyzed in Alternatives 1 and 2. The maximum charge size for these four explosions will be 2.5 pounds. Adverse impacts would not be measurable because of low level of activity, the benign nature of the majority of explosion byproducts, and standard site investigation and clean up procedures."  It appears that the meaning of this paragraph is that there will be 60 underwater detonations as of this moment in time, and after the Explosive Ordnance Disposal Mobile Unit Eleven is relocated, the underwater detonations will decrease to four. The schedule for the move of Explosive Ordnance Disposal Mobile Unit Eleven should be included in the description.	The effects on species analysis is included in the No Action Alternative section of each applicable species in Chapter 3 of the Draft EIS/OEIS and is included in the FEIS.
	A full schedule of when reductions of underwater detonations decrease from 60 to four (days, weeks, months, years) needs to be included in the description. The effects on ESA-listed species and non-listed species for the number of detonations, seasonality of detonations, and size of detonation all need to be addressed as part of the action, up until and including the time that detonations have decreased permanently to four or less. This should be included in the FEIS.	
	3.6.1.3 Nearshore Habitats Benthic Algae, Kelp and Eelgrass	Pages 3.6 6 and 7 discuss and map the location of kelp beds in the project area. No training activities take place in the Strait of Juan de Fuca,
	Page 3.6-6 "Kelp and seagrass beds provide important habitat for many species all activities under the Proposed Action would occur at least three nm offshore beyond the zone for such habitat."	and there are no shoreline activities within the OCNMS, where kelp beds are concentrated. The small-scale underwater mine shape field would be located outside the OCNMS, in water depths between 500-1000 feet,
DOI-25	This statement is inconsistent with the described operations and interrelated operations in the DEIS. The proposed operations in W-237A have a high potential to physically impact kelp bed areas. In addition, the placement of the Small Scale Underwater Training Minefield as described could be located in such an area causing a high level of perturbance to natural functioning and quality of the area. This discrepancy needs to be clarified and the impacts reevaluated in the FEIS.	beyond the depths at which kelp forests grows.
DOI-26	Pages 3.6-18, 3.6-21, 3.6-23 "Potential nearshore habitats of concern	Text of the FEIS has been changed to clarify the potential occurrence of

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	include eelgrass and kelp beds, but these habitats do not occur within the MCT areas and none would be affected. Therefore, the analysis of impacts to such habitats is not considered further. "	eelgrass in Crescent Harbor and to clarify information on the nature and location of underwater detonation training activities.
	This statement is inaccurate. Surveys performed by the Washington Department of Fish and Wildlife in 2006 clearly show that eelgrass bed occur at minimum in patchy concentrations at or near all of the named detonation sites (EOD Crescent Harbor, EOD Floral Point, and EOD Indian Island). When assessing these actions it is prudent to remember that the entire action area (area of effect) needs to be assessed, not just the project area. Additionally, effects to species dependant on these areas of eelgrass also need to be assessed, as eelgrass provide spawning habitat for many forage fish which are one of the Primary Constituent Elements (PCE) of bull trout critical habitat. Based on the 2006 Washington Department of Fish and Wildlife Survey, impacts to eelgrass beds need to be reevaluated. This reevaluation of impacts and any appropriate mitigation measures should be included in the FEIS.	
	Acoustic Effects of Underwater Sounds to Fish, Explosive Sources, Page 3.7-28  Analysis of effects to threatened and endangered species requires the use of	The Draft EIS/OEIS includes reference to Turnpenny et al. 1994, Turnpenny and Nedwell 1994, and Popper 2003. Further literature search was performed on the additional suggested references and it was found
DOI-27	the best available science under the Endangered Species Act. The information provided in this section is lacking other important literature. A further literature search using information that is more recent is needed. Additional sources: Yelverton, J.T. 1981.; Steevens et al. 1999; Fothergill et al. 2001; Cudahy and Ellison 2002; U.S. Department of Defense 2002; Popper 2003; Turnpenny and Nedwell 1994; Turnpenny et al. 1994; Entranco and Hamer Environmental 2005 Ross et al. 2001; Nedwell and Edwards 2002, Nedwell et al, 2003; Richardson et al. 1995; Teleki and Chamberlain 1978; Thomas and Washington 1988; National Marine Fisheries Service Biological opinion 2008, NMFS tracking number 2001.00063'; USDC. 2008, Biological opinion NMFS tracking number 2001.00063; U.S. Fish and Wildlife Opinion 2009, FWS tracking number 13410-2009-F-0020.  This additional information should be used to reanalyze impacts to threatened and endangered species and this analysis included in the FEIS.	that they were contained within the November 2008 Biological Opinion for underwater EOD activities' in the NWTRC. The BO serves as a reference for the draft EIS/OEIS, and therefore these data sources are included in the analyses.
DOI-28	Acoustic Effects of Underwater Sounds to Fish, Explosive Sources, Sonar, Low-Frequency Sonar, Pages 3.7-35,36 - "Although some behavioral modification might occur (i.e., startle, avoidance, etc.), adverse effects from low-frequency sonar on fish, including sensitive life stages (juvenile fish, larvae and eggs) are not expected. If they occur, behavioral responses would be brief reversible, and not biologically significant. The use of Navy low-frequency sonar would not compromise the productivity of fish or adversely affect their habitat."	Text in 3.7 Fish has been edited to focus the description of sonar on mid- and high-frequency and to clarify that low-frequency sonar is not used under the proposed actions.
	In several other locations within this document, it states that low-frequency sonar will not be used. The discrepancy regarding the use of low-frequency sonar should be clarified and a full analysis of effects to marine species should be performed, including effects to listed threatened and endangered	

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	species and included in the FEIS.	
DOI-29	"Underwater detonation exposure effects to the sea otter and North Pacific right whale were not modeled because density data were unavailable for these species." "Level B sonar exposure effects to the sea otter and North Pacific right whale were not modeled because density data were unavailable for these species."  The FEIS should include an analysis of the potential effects of underwater detonation and Level B sonar exposure to sea otters using information sources on surrogate species. With care, other information sources can be extrapolated or at least discussed in the context of a species of interest. Additionally, the Department recommends that the FEIS contain a marine animal (mammals, diving birds, and fish) monitoring program that would assess the effects of sonar on marine life to verify whether the activity would or would not have adverse effects.	Thank you for suggesting mitigation measures to determine and verify the effects of sonar on marine animals. Pease specify measures and indicators to be defined. This can be addressed as part of the ongoing consultation with FWS on EOD activities.  Text of the EIS has been clarified to address this comment.  The habits and locations of the sea otter in the project area can be found on pages 3.9-23 through 25. Sea otters inhabit nearshore environs of relatively shallow depth (40m) with kelp beds. Navy training activities avoid otter habitats, and standard procedures restrict weapons firing near seaweed mats or kelp beds. In addition, underwater detonation (EOD) training activities are not conducted in or near kelp bed habitats. No impacts to sea otters are anticipated to result from Navy activities.
DOI-30	MARINE MAMMALS 3.9  There is no discussion of the potential of entanglement for sea otters or other marine mammals in a torpedo guide wire. The FEIS should include an analysis of this possibility and appropriate mitigation measures.	Text has been edits to include the information on potential torpedo entanglement.  A maximum of 2 torpedoes would be used in the OPAREA per year.  Torpedoes are expended outside 12 nm, beyond the range of wading birds, and most diving birds. The potential for entanglement is extremely low and effects would therefore be discountable.
DOI-31	BIRDS, Entanglement, Page 3.10-28  There is no discussion of the potential of entanglement for marbled murrelet or other sea birds in a torpedo guide wire; provide an analysis of this possibility or justification why it is unnecessary. The FEIS should include an analysis of this possibility and appropriate mitigation measures.	Text has been edits to include the information on potential torpedo entanglement.  A maximum of 2 torpedoes would be used in the OPAREA per year.  Torpedoes are expended outside 12 nm, beyond the range of wading birds, and most diving birds. The potential for entanglement is extremely low and effects would therefore be discountable.
DOI-32	BIRDS, 3.10.3 Environmental Consequences, Page 3.10-20. "An assessment was not conducted on the effects of sonar on birds. A study documented by NMFS (2003) concluded that effects to birds from sonar were unlikely. Although some species may be able to hear sonar, several factors were identified in that section that would make effects improbable. Those factors, plus the low level of sonar use within the NWTRC (approximately 100 hours each year during training and vessels transit) would result in a low likelihood of seabird exposure. Therefore, sonar use is not addressed further."  The location, timing, and type of sonar proposed, as well as the clear identification of the target species, are all more critical factors in determining exposure risk than the duration of sonar use. As a result, the FEIS needs to include a species-specific exposure analysis of sonar use, given the documented lethal and sublethal consequences on marine mammals associated with sonar use. If exposure is expected for some avian species, the Department recommends that the Navy conduct scientific studies to evaluate the effect of active sonar on diving marine bird such as marbled	Species-specific responses to sonar, or other sounds in the water, are not available for avian species. Completion of hearing studies on birds is outside the scope of this NEPA compliance effort. If the FWS can provide additional information on sonar effects on birds, this can be incorporated, as appropriate.  Sonar is not used for training activities in the vicinity of murrelet habitat (in shallow waters adjacent to old-growth forests). FEIS text has been edited to clarify this.

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	murrelet. There is concern that active sonar may result in sublethal behavioral changes to animals occurring in the sonar use area. For example, sonar use could cause murrelets to avoid important foraging areas leading to reduced foraging success. If the availability of prey are limiting to the species, such avoidance could further suppress survivorship of murrelet chicks and/or adults.  This additional analysis should be included in the FEIS.	
DOI-33	TERRESTRIAL BIOLOGICAL RESOURCES, Aircraft Overflights, Page 3.11-14  Lynx are solitary mammals that prefer covered areas and are susceptible to noise disturbances. Effects to lynx have not been assessed in the document for low-level flights over the Darrington MOA and should be included in the FEIS.	The FWS has provided GIS layers of known lynx habitat to the Navy for review and comparison with proposed activities. Potential impacts to this species will then be included in the analysis, as appropriate.
DOI-34	DEIS Vol. II 4.2.7 Fish, Page 4-18 "Due to the wide geographic separation of most of the activities, Navy activities would have small or negligible potential impact, and their potential impacts are not additive or synergistic. Relatively small number of fish would be killed by shock waves from mines, inert bombs, and intact missiles and targets hitting the water surface."  "Underwater explosives may result in disturbance, injury, or mortality to ESA-listed salmonid species. However, under the Proposed Action, the total number of underwater detonations would decrease from 60 events to 4 events annually."  It appears that the reasoning presented in the DEIS attempts to downplay the significance of the effects of the Navy's proposed operations, which as described, constitute the "take" of ESA listed resources. Further, this stated "negligible" impact is offered in the absence of analytical support. As a result, the FEIS should include a description of activities that, along with the proposed timing, location, duration, intensity, and/or :frequency, that could lead to the "harm" and "harassment" of listed resources. This information would provide the FWS the opportunity to assess the scope and scale of the response of listed species and/or affects to designated critical habitat.	The Cumulative Impacts section of the document is intended to put the effects of the proposed action into context with other past, present, and foreseeable future actions (Federal and other) occurring in and near the project area.  The full analysis of impact to fish and their habitats can be found in 3.7 Fish (and Essential Fish Habitat) and 3.6 Marine Plants and Invertebrates.
DOI-35	DEIS Vol. II, 4.2.10 Birds, 4-28 to 4-31 "Listed sea bird species in the NWTRC include the Short-tailed Albatross, the Marbled Murrelet, the California Brown Pelican, and the Western Snowy Plover. In accordance with ESA, under the Proposed Action, vessel movements, aircraft overflights, ordnance use, underwater explosions and detonations, and entanglement may affect but are not likely to adversely affect the listed sea bird species population, overall foraging success, or breeding opportunities. The cumulative impact of the Proposed Action and the identified projects activities in Section 4.1.2 and 4.1.3 could impact individual seabirds, their overall foraging success, and breeding opportunity, but these effects are not likely to adversely affect any seabird population. Therefore, there would be no cumulative effects related to seabirds as a result of implementation of the Proposed Action in conjunction with past, present, or planned projects in the Study Area."	The Cumulative Impacts section of the document is intended to put the effects of the proposed action into context with other past, present, and foreseeable future actions (Federal and other) occurring in and near the project area.  The full analysis of impact to birds and their habitats can be found in 3.10 Birds.  The text in this Final EIS/OEIS has been updated with information from the related NWTRC Biological Evaluation that includes an analysis of all potentially affected ESA-listed seabirds.

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	The DEIS identifies effects that may occur to ESA-listed seabirds associated with several activities proposed in all the Alternatives, most notably the proposed use of underwater explosives and detonations, ordnance use, aircraft overflights (down to as low as 300 feet above the ground), and extensive vessel movements throughout the NRTC. The list of effects presented in the DEIS includes the risk of physical injury or mortality and the disruption of normal seabird behavior associated with breeding, feeding, and sheltering. The FWS agrees with these findings. However, these effects, along with the conservation measures associated with each Alternative, do not support a "may affect, not likely to adversely affect" determination for these ESA-listed species. Unless additional information and/or analysis is presented, formal consultation with the FWS will be required pursuant to 50 CFR Part 402 §402.14.	
	The FWS is aware of many species of seabirds known to use coastal and open water marine environments within the proposed <i>Northwest Training Range Complex</i> and these migratory species, while not protected under the ESA, should be considered for effects pursuant to the Migratory Bird Treaty Act. Noise pulses have been found to cause general avoidance reaction, changes in behavior (e.g., dive cycles, respiration), and displacement from foraging areas.	
	One species, the Short-tailed Albatross ( <i>Phoebastria albatrus</i> ), is a listed species that does occur and the training performed in the open water areas of the PACNW OPAEA. The potential for aircraft strikes and lethal and sublethal injury from sonar, detonations, and entanglement should be evaluated and the analysis and appropriate mitigation measures should be included in the FEIS.	
	We appreciate the opportunity to review and comment on this DEIS. Consultation and technical assistance requests, questions, comments, documents, and required progress reports should be directed to the Fish and Wildlife Service's Kevin Shelley; telephone: (360) 753-4325; or via e-mail: Kevin_Shelley@fws.gov. If you have any other questions, please contact me at (503) 326-2489.	
Dougherty-01	I first knew about The NW Naval Training Program in my local newspaper the Mendocino Beacon on Thursday February 26th. Several times that week I tried to read the EIS on the announced website but it did not provide my computer with the information. This in itself should be enough to cancel the process or at least extend the time frame and fix the website so any computer can pull up the EIS. In the Whidbey News (online) I found that Clinton Washington resident John Hurd said he could not get access until the first week of February what with the deadline at that point February 12th.	The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could
	Hurd contacted Navy officials about the issue and they finally put him in touch with a computer engineer for a government contractor that runs the Web site. The contractor finally fixed the problem Thursday, less that a week before that deadline of February 12th.  The EIS was not available to me on my computer the week before the March 11th deadline, and I only heard about this proposal in my daily newspaper	be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.

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	the last week of February? Why have we in Northern California not heard about this proposal- initiated in December 2008? How can you expect us to comment when the EIS is not available? The nearest hard copy is in the Humboldt library -4½ hours away.	
Dougherty-02	In researching the program as it already exists in Washington state I found that the you (the Navy) are being sued for exploding ordinance in the Puget Sound waters, allegedly killing thousands of fish and potentially harming federally protected species. The suit asks the court to issue an injunction against further training operations in Puget Sound or order significant protective measures to prevent harm to threatened species and habitat until the Navy has brought training in compliance with federal regulations In one exercise involving a five-pound explosive charge set off near Naval Air Station Whidbey Island, observers counted 5,000 dead fish on the surface but estimated that up to another 20,000 fish died and sand out of sight to the seabed." www.pnwlocalnews.com/whidbeyIswr/news	Comment noted.
Dougherty-03	The Newport News Times reported that Brett Hearne fisherman since 1978 hauled in a 3 foot barnacle encrusted aluminum canister with serial and bar code numbers which would indicated it could be anything from a mortar casing to an aircraft cylinder to launch missiles. "We drag about 40 days of the year. And we haul in about 3 to 4 pieces like this per year." www.newportnewstimes.com February 13,2009. What toxic or potentially toxic compounds are known or can be reasonably expected to leak from these munitions or ordnance and why aren't the effects considered in the EIS You must indicate what compounds or chemicals are in anything that will be left in the ocean.	The fate and transport of potentially hazardous materials were analyzed in Section 3.3 – Hazardous Materials and in Section 3.4 – Water Quality in the Draft EIS/OEIS.
Dougherty-04	It is imperative that your operations are in compliance with Federal AND State regulations. Our air quality regulations and the Safe Drinking Water and Toxic Enforcement Act of 1986 must be met or you the Navy will be sued by us.	The Navy's regulatory compliance is discussed in each appropriate section; air quality in Section 3.2, and water quality in Section 3.4.
Dougherty-05	Furthermore, how can we assess the impact of your program when you do not list all the chemicals which will be used. Will you be using depleted uranium, red and white phosphorus and weather modification chemicals? If any of these are used we need to see a complete study of these chemicals showing human health and animal health effects, also studies of cumulative and synergistic effects of chemicals on humans and animals (terrestrial and marine).	All of the materials expended during proposed Navy activities, and their byproducts, are described in Sections 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, and 3.9.  White phosphorus and depleted uranium are not used in the NWTRC and are not part of the proposed activities.
Dougherty-06	And since there is no end date to this program it would seem that once things are set into motion there is no end to it. This is preposterous. There should be a timetable, and end date subject to public review before reinstating the program if you wish to continue.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Dougherty-07	It is beyond folly to set up a minefield for training on the bottom of the ocean floor known to have earthquake faults.	The minefield as described in the Draft EIS/OEIS does not include any explosives and does not involve any detonations.
		The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the

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		U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes."  ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
Dougherty-08	It is beyond folly to harm citizens of the United States, contaminating our drinking water, threatening our food sources and polluting our air with the stated intention of protecting us or securing our safety.  It is beyond folly to contaminate the atmosphere with chemicals that accelerate global warming threatening the whole world's safety in the name of protecting America.	The potential impacts to these resource areas were analyzed in the Draft EIS/OEIS as described above.
Drewes-01	We opposed the Navy plan for the North coast. While we realize that the navy must defend our country, we are concerned about environmental and economic impacts-particularly regarding ocean ecosystems and fish. Sonar testing has already been found to negatively impact the whales and dolphins and other turtles and birds and sea animals.	The potential impacts to these resource areas were analyzed in the Draft EIS/OEIS in their applicable sections.
Drewes-02	Toxic wastes from ships and bases and aircraft negatively impact coastal areas and wildlife. We have recreational and fishing industries that must be protected.	The potential impacts from ship discharges were analyzed in Section 3.4 of the Draft EIS/OEIS.
Drewes-03	In addition the electrical EMF's and other emissions impacts and negatively effect life. EMF's have been shown to cause brain damage and cancer and other health effects. We are also concerned about invasion of privacy by surveillance activities.	The analysis of potential impacts from radio waves was included in Section 3.16.6 of the Draft EIS/OEIS. The Navy has been operating radar systems for decades with no history of harm to humans or wildlife. The safety precautions employed by the Navy have been proven successful and will continue.
Dullinger-01	No need to warfare. No bombs dropped in the Ocean. No public support for Sonar testing. Just like in Hawaii the people will stop expanding the Navy test site.	This comment has been duly noted.
Dzurella-01	Relative to marine mammal take:  A. For the Following Reasons  1. The Data available to produce the risk function for exposure of marine mammals to midfrequency sonar were so slim (as stated in the EIS), and as further stated in the EIS, reviewers strongly differed in the mathematical and scientific approach to such data as exists as applies to whales, and	Because of the complexity of this field of science, it is likely to continue evolving for many years. It is important that the Navy continue with this EIS now so that potential impacts of required operations are understood, within the limits of the best available science.
Dzurella-02	2. Outputs generated by the risk formation can be made more realistic in the future (as stated in the EIS), therefore it would reduce take now for the Navy to avoid areas where whales are apt to congregate for feeding, migration, etc. and	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  As the DEIS states, and as stated in public articulations of the

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		professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need.
Dzurella-03	B. The Navy, with the cooperation of scientific & educational institutions, needs NOW to find far better methods to detect marine mammals than by watchstanders alone, no matter how well trained.  Thank you and John Mosher and Brian Wauer for coming down to appear at the Board of Supervisor's meeting in Ukiah.	Many of the mitigation measures described in Section 3.9.4; Marine Mammals, Section 3.8.3; Sea Turtles, and Chapter 5 rely on detection of sea turtles and marine mammals. As new technologies in visual or acoustic detection evolve and mature, the Navy will take advantage of them to extend the range and improve the probability of detection of species.
Environmental Protection Agency (EPA)-01	This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have assigned an EC-2 (Environmental Concerns, Insufficient Information) rating to the Draft EIS/OEIS. A copy of the EPA rating system is enclosed. EPA understands the need to conduct realistic training and appreciates the Navy's generally excellent environmental analysis. We remain concerned, however, about potential impacts from Mid-Frequency Active (MFA) sonar and training activities in the Olympic Coast National Marine Sanctuary (OCNMS).  To address our EC-2 rating and more fully protect the environment we recommend additional mitigation measures for Alternative 2 (40 CFR § 1502.14). Additional mitigation measures that we especially support include the incorporation of emerging technologies into marine mammal monitoring and mitigation measures and special restrictions for the OCNMS. The above and other concerns and recommendations are detailed in the enclosure.  Thank you for this opportunity to comment on the Proposed Action and if you have any questions please contact Erik Peterson of my staff at (206) 553-6382.	This comment has been duly noted. Specific comments addressed below.
EPA-02	Marine Mammals  Scientific Support for MFA Sonar Shut Down Zones  We are concerned that the Chapter 5 sub-section on "Alternatives Mitigation Measures Considered but Eliminated; Using larger shut-down zones" does not list the scientific support for the elimination of larger shut-down zones as a mitigation measure (See p. 5-26). We believe this sub-section overemphasizes the limitations of lookouts for marine mammal monitoring and under-emphasizes the scientific support for the effectiveness of shut-down zones in precluding direct physiological effects from exposure to MFS sonar. Recommendation:  We recommend that the Final EIS/OEIS's version of Chapter 5 include specific references to the scientific support for current MFA sonar power down and shut down zones.	Made the following change in Chapter 5 of the FEIS:  Distances at which the Navy begins powering down or shutting down sonars has been coordinated with the National Marine Fisheries Service (NMFS) based on a significant amount of scientific support. A summary of that information follows and was added to the discussion on p. 5-26.  As stated in the Draft EIS/OEIS, the purpose of the shut-down and power-down zones is to preclude direct physiological effect from exposure to MFA sonar. The earliest physiological effects from sonar would be temporary threshold shift (TTS). As explained in Section 3.9.2.1 (p. 3.9-65) of the Draft EIS/OEIS, TTS is estimated to occur for most marine mammals at a received level of 195 dB re 1µPa2-s. For the most powerful sonar used in the NWTRC—the SQS-53C—the maximum range at which a marine mammal would receive 195 dB is 140 m or 153 yards.  As described in the discussion of Safety zones (shut-down and power-down zones) on p. 5-12, any marine mammal sighted within 1,000 yards would trigger a sequence of power reductions, and eventually a shut

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		down by 200 yards, all well outside of the 153 yard range at which the animal would first experience any direct physiological effect. Therefore, no scientific evidence exists for expanding the existing sonar power-down and shut-down zones.
EPA-03	Emerging Technologies and Monitoring and Mitigation Measures for Marine Mammals  One need for the Proposed Action is to support the acquisition and implementation of advanced military technology into the Fleet. We understand that many of these new technologies are not developed to the point where they can be utilized as mitigation or monitoring tools for marine mammals. However, EPA believes emerging tools and techniques with the capability to contribute to marine mammal monitoring (e.g. Broad Area Maritime Surveillance (BAMS) UAS.) may lead to advances in the effectiveness of mitigation measures.  Recommendation:  EPA recommends that the Final EIS/OEIS include a description of how new and emerging tools and techniques might be incorporated into marine mammal monitoring and mitigation measures on the NWTRC.	Added to Section 5.2.1:  "Many of the mitigation measures described in this section rely on detection of the sea turtle or marine mammal. As new technologies in visual or acoustic detection evolve and mature, the Navy will take advantage of them to extend the range and improve the probability of detection of species."
EPA-04	Olympic Coast National Marine Sanctuary (OCNMS)  We are concerned that there are no special restrictions for the OCNMS. EPA believes that the OCNMS is an exceptional biological resource and special restrictions, if not regulated by law or policy but possible at little to no cost, are an appropriate aspect of good environmental stewardship.  Recommendation:  We recommend that the Final EIS/OEIS consider additional reasonable special restrictions protective of the OCNMS. For example, we believe adding a "No discharge" restriction for all waste types listed in Table 3.4-1 for some or all of the OCNMS would have water quality benefits.	Table 3.4-1 from the Draft EIS/OEIS did not detail all restrictions to discharge. The source for the information in this table is found in OPNAVINST 5090.1C (DoN 2007). This instruction also states that National Marine Sanctuaries (which includes the Olympic Coast National Marine Sanctuary) are prohibited discharge zones for U.S. Navy shipboard wastes. The text in the Final EIS/OEIS in which this table is referenced has been revised to clarify this important restriction.
EPA-05	Greenhouse Gas Emissions Analysis and Voluntary Reduction and Mitigation Measures  We believe that the EIS would be strengthened by including an annual greenhouse gas (GHG) emissions analysis and consideration of voluntary GHG reduction and/or offset measures. We believe that a GHG emissions analysis and the consideration of voluntary offset and/or reduction measures is consistent with the Navy's stated need to "Maintain the long-term viability of the NWTRCT as a premiere navy training and testing area while protecting human health and the environment, and enhancing the quality, capabilities, and safety of the Range Complex"(p. ES-5). EPA supports GHG analyses to increase preparedness for and decrease potential costs associated with meeting local, county, state, regional, national, and international responses to climate change.¹  Recommendations:  We recommend that the Final EIS/OEIS quantify the annual GHG emissions that would occur as a result of training activities in the NWTRC. This estimate	GHG emissions were not calculated for this EIS/OEIS because of the instability in requirements, and changing trends in the field of global climate change analysis. Because there is currently no set guidance from either the states or U.S. EPA on limitations, restrictions or requirements, the Navy has chosen to limit the EIS/OEIS to those factors that are ready for analysis.  As for voluntary reductions suggested by the comment, the Navy makes significant efforts to reduce fuel and energy consumption, thereby resulting in reduced GHG emissions. These efforts include; maximum use of simulation, alternative fuels use, and training locally to reduce travel (one of the attributes of the NWTRC is that it provides training opportunities for locally based forces). Any further analysis of GHG emissions resulting from the proposed action would provide no new impetus for the Navy to continue its efficiency programs.

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	could be based on the same activities that are used to quantify the criteria pollutants in Appendix C of the Draft EIS/OEIS with one difference. Instead of limiting aircraft emissions to those occurring below 3,000 feet we recommend that the GHG analysis include all aircraft emissions.	
	For any OHG analysis which may be included in the Final EIS/OEIS we suggest utilizing an equivalencies calculator to translate emissions into terms that are easier to conceptualize. If the equivalency to passenger vehicles is deemed appropriate we suggest using EPA MOBILE6.2 fuel economy numbers (http://www.epa.gov/OMS/climate/420f05004.htm). In the absence of regulatory standards for GHG emissions we suggest that the Final EIS/OEIS consider voluntary reduction and offset measures. We support these measures in the interests of energy conservation and good environmental stewardship. Potential voluntary measures (some of which the Navy is already utilizing) include, but are not limited to:	
	• "cold-ironing", including the use of modular and mobile energy sources;2	
	alternative fuels in ships, airplanes, ground fleets and facilities;	
	• inclusion of operating criteria which maximize fuel efficiency when mission appropriate;	
	• business management practices which reduce personnel travel distance to and from their homes and duty stations;	
	<ul> <li>reduced travel to and from training locations within or outside of the NWTRC;</li> </ul>	
	commit all Naval Stations (NAS) to the Federal Green Challenge	
	(http://yosemite.epa.gov/rIO/ECOCOMM.NSFIFederal+Oreen+Chall <i>enge/</i> Fed Green);	
	maximum use of computer simulated training.	
	<sup>1</sup> Consider, for instance, Local Governments for Sustainability, King County Climate Plan, Northwest Regional Greenhouse Gas Initiative, Western Climate Initiative, the Energy Independence and Security Act of 2007 and the Bali Action Plan.	
	<sup>2</sup> See, for example, http://www.c1eanairmarinepower.com/	
	The Environmental Risk of Tungsten Gunshells	Limited scientific studies have been completed on potential environmental
	We are concerned about the lack of environmental risk analysis for tungsten Close-In Weapon System (CIWS) rounds. Tungsten is an "emerging contaminant" the environmental risk of which is relatively unknown. <sup>3</sup>	impacts of tungsten and tungsten alloys. To date, the studies indicate that the greatest tungsten threat concerns a specific alloy, and only when embedded in animal tissue. Because the tungsten rounds are used at
	Recommendation:	sea, and only during certain gunnery training exercises, the fate of tungsten at sea is germane. Section 3.3.1.1 of this Final EIS/OEIS
El 77 00	We recommend that the Final EIS/OEIS discuss the environmental risk of CIWS tungsten rounds in the NWTRC. The CIWS analysis should address materials composition (e.g. cobalt, nylon, iron, nickel, bronze, tin and/or lead), the solubility of these materials in salt water and their potential toxicity for marine life.	analyzes tungsten in sea water.
	³ http://www.epa.gov/tio/download!contaminantfocus/epa542f07005.pdf	
	(news article and attachment of EPA rating system included with comment)	

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Environmental Voices (EV)-01	Environmental Voices would like to express their comments regarding the U.S. Navy's current Environmental Impact Statement (EIS) to expand warfare testing in Northern California, Oregon, Washington and Idaho.  We feel that this program should <b>not</b> be approved for the following reasons: The U. S. Navy is currently planning to expand their warfare testing programs to Northern California, Oregon, Washington and Idaho. They have not properly notified the public of the Environmental Impact Statement (EIS) that has a comment deadline of April 13,2009.	The Navy believes that its notification efforts were sufficient. Public notification began in July 2007 for this EIS/OEIS. Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the
EV-02	I have reviewed this EIS and believe the U.S. Navy has down played the health and environmental dangers of this program. This warfare testing, most likely, impact California's fishing industry and decrease our salmon and other marine life. Some of the hazardous materials listed include petroleum products, heavy metals and combustion products and we believe this list of hazardous materials is not complete. We need to know the list of toxic chemicals that would be used that could affect the public, animals, marine life, water supplies, trees, agriculture and soils.	closing date.  The fate and transport of potentially hazardous materials were analyzed in Section 3.3 – Hazardous Materials and in Section 3.4 – Water Quality in the Draft EIS/OEIS.
EV-03	This includes information on whether or not depleted uranium, red and white phosphorus, weather modification and mitigation chemicals will be used, whether or not atmospheric testing will occur along with aviation over-flights and bombing runs.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.  Neither weather modification nor atmospheric testing are part of the proposed action.
EV-04	We are also concerned about the "taking" of marine live, animals/wildlife.	The potential impacts to the various resource areas were analyzed in the Draft EIS/OEIS in their applicable sections.
EV-05	In addition, another concern we have is that the sonic booms and possible explosions in the ocean could trigger earth quakes in California.	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
EV-06	The draft EIS does not fully address the potential environmental impacts on multiple resources, like air quality, water resources, airborne acoustic environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety. Environmental Voices has not had the necessary time to prepare a proper comment to this EIS.	The potential impacts to the various resource areas were thoroughly analyzed in the Draft EIS/OEIS in their applicable sections.

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EV-07	Since the public has not been properly notified, Environmental Voices is requesting that public hearings be held at California State and UC Colleges (Especially those colleges and universities along the Coast of California) and in Sacramento, Los Angeles, Long Beach, San Diego and other cities throughout California. This type of public awareness program should also be conducted in Oregon, Washington, and Idaho. These public hearings should be advertised through the media (newspaper, television and radio) and allow the public enough time to prepare for the hearing. In addition, other environmental organizations should be notified and given adequate time to respond to the EIS.  We already have enough toxic chemicals in our air, water and soil that are destroying our environment and we feel that the U.S. Navy does not need to expand this program, as it is our understanding that there are similar programs already being conducted in Southern California and other locations	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas and it was determined that colleges and universities along the Coast of California and in Sacramento, Los Angeles, Long Beach, San Diego and other cities throughout California were outside the geographic range of influence for the NWTRC.  The Navy made these decisions within the constraints of a limited public notification budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F. Finally, the Draft EIS/OEIS has been available for download since December 2008 from the NWTRC EIS website at: http://www.nwtrangecomplexeis.com  Environmental Voices has been added to this project's contact list. Thank
	around the world.  Please take our comments into consideration. If you need additional	you for your interest.
	information or have any questions, please call me at (916) 595-7197. We would also like to be added to your e-mail/contact list for information about this and other programs that are affecting our environment.	
	[Attachment A – Newport News-Times article <i>Navy's tactics worry fishermen</i> posted February 13, 2009]	
	Regarding: ( EIS/OEIS) (AMRAAM) (IEER) (AEER) and all related tests and equipment.	This comment has been duly noted.
	I strongly disagree with the proposed and continued use of any and all of the above listed systems.	
Epifano -01	Our entire planet sits in a Universe that is interconnected and fragile. All elements, all creatures are interdependent in regards to our physical nature. The sea mammals and floor need to be maintained in pristine condition for the health and nourishment of those now and future generations.	
	Choices today affect all of our well-being, whether fish populations are affected or depleted. Uranium leaks anywhere, our fragile balance and homeostasis is threatened!!	
	There are other resolutions! I Pray and Meditate on Peace!! Thank You.	
Eshlemann-01	Thank you for listening. No Action Alternative is our preference after viewing the Navy exhibits and listening to the comments from members of fishing organizations (i.e. Whiting, Halibut, Salmon, Tuna, etc.) and comments about impact on sea mammals from sonar and live ammunition given by OSU scientist and various other persons with expertise or local knowledge of a particular area likely to be impacted with any escalation of usage by the Navy. We are not many citizens, but the beauty, tourism, fishing industry and habitat of the ocean can not escape detrimental environment effects if sonar and live target practice is implemented. Please do not make changes in current Navy usage.	This comment has been duly noted.
Firth-01	I am writing to express my most profound opposition to your plans for testing	The proposed action includes no testing of new weapons, but rather the

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	sonar weapons along our coastlines and other areas in the Pacific Ocean.  Here are my reasons:	training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Firth-02	The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the "Navy Warfare Chemical Menu" that will contaminate our air, water, and soil.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can he extremely toxic. Berkowitz stated that the deposition of washout ofWhite Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)	White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Firth-03	Water Quality Criteria for White Phosphorus - Authors" Kowetha A. Davidson; Patricia S. Hovatter, Catherine F. Sigmon, Oak Ridge National Lab 1N: Abstract: Data obtained from a review of the literature concerning the environmental fate and aquatic and mammalian toxicity of white phosphorus are presentedLaboratory and field studies indicate that white phosphorus is quite toxic to aquatic organisms, being the most sensitivebioaccumulation is rapid and extensive, with the greatest uptake in the liver muscle of fish and the .hepatopancreas of lobsterother toxic effects to aquatic organism include cardiovascular and histological changes. (1987) (White Phosphorus is an airborne contaminant - used in fog oil and smoke obscurants.)	
	Mammalian Toxicology and Toxicity to Aquatic Organism of White Phosphorus and 'Phossy Water' by Authors Dickinson Burrows; Jack C. Dacre: AWARE INC Nashville TN - Abstract: "white phosphorus is highly toxic to both experimental animals and manwhite phosphorus is also highly toxic to aquatic animals"	
	Therefore for not only the sake of our wildlife in these areas but human life as well, which could be seriously impacted, DO NOT GO THROUGH WITH THESE DANGEROUS AND LIFE THREATENING PLANS.	
Fishermen Involved In Natural Energy (FINE)-01	Thanks for extending the public comment period until April 13, 2009. Local notification of the original deadline was certainly insufficient to provide all of the interested parties with an opportunity to respond.  Several years ago, the Board of Commissioners in Lincoln County, Oregon,	The two range enhancements discussed in the comment; the portable undersea tracking range (PUTR), and the underwater training minefield were described in Sections 2.6.2.2 and 2.6.2.5 of the Draft EIS/OEIS respectively.
	officially appointed a small but representative group of commercial and recreational fishermen to advise them on how the County should respond to	The potential economic impact of these two range enhancements was described in Section 3.14.2.4.
	an impending wave energy movement that could potentially preempt these	Although no explosives are involved with either of these, both involve

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	two industries from their historical use of ocean waters of Lincoln County.  More recently the Commissioners expanded the focus of the group to include discussion of the controversial marine reserve concept being orchestrated by Governor Kulongoski since this issue also posed a threat to the long-term economic viability of members of these two industries.	either temporary or permanent installations on the sea floor that could be incompatible with some commercial fishing activities. Additional analyses as they relate to Socioeconomic and other resource interests will be conducted before siting.
	The Commissioners, after learning of your plans to reassess and allow your activities within the Northwest Training Range Complex, asked the advisory committee to respond, in writing, with their questions, comments and concerns. While we recognize, understand and appreciate the Navy's mission to defend us, we are never-the-less concerned about the potential impacts of expansion of your activities within the NTR Complex on our livelihoods and subsequently, in the communities in which we live.	It is also important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	Newport, one of the top commercial and recreational fishing ports in the state and the nation, is also the Lincoln County seat. The wide diversity of fish and shellfish in local ocean waters have historically provided a solid economic base of support for the area's 500 commercial fishermen, their families and a wide range of local businesses, including multiple seafood processing facilities, marine supply outlets and fuel docks.	
	To put this in perspective, the 2007 combined annual commercial seafood landings for Newport and Depoe Bay were 71.1 million pounds valued at \$30.8 million.	
	In addition, there has been a very significant increase in recent years in the number of locally owned large offshore recreational vessels fishing for albacore tuna and halibut, as well as many recreational charter vessels building their operations around whale watching and bird watching.	
	Following are our comments on the DEIS:	
	You state in the executive summary of your DEIS that, if you choose alternative two, there is a potential for economic impacts to commercial fishing families of the portable undersea training range and underwater training minefield. We are not sure, from reading your material, in what form, or from what, those potential impacts may arise. If it is from debris, left on the bottom as a result of any of your increased activities, we are genuinely concerned for the following reasons:	
	On or near bottom trawling for groundfish and shrimp are two of the primary commercial fisheries in this area. With fishing gear ranging in value from \$25,000 to \$60,000 per vessel, any significant debris left on the seabed inside of 700 fathoms which is large enough to cause the trawler to "hang" the gear may not only cause serious economic hardships, but also pose an imminent threat to the safety of the vessel and crew.	
	We are also concerned about the potential hazard of any live ordinance deposited on the seabed that could be captured by a trawl net and subsequently deposited on the deck of the vessel when the net is emptied.	
FINE-02	One of the "bullets" in your executive summary found under Findings of the Draft EIS/OEIS Cultural Resources states "there will be no likely effects to shipwrecks from expended materials". That statement is confusing. Does it	As described in the body of the Draft EIS/OEIS, the Navy would expend a number of materials due to the proposed activities. However, the analysis concluded, due to the location of these activities relative to known

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	mean that your exercises will be expending materials in the ocean, but that these materials, in all likelihood, will not cause shipwrecks? What are the expendable materials? Sinking or floating?	shipwrecks, that these expended materials will not likely affect the shipwrecks or other cultural resources.
FINE-03	• You state in the section on Potential Effects to Marine Life from Explosives. first, that the use of explosives may result in injury or mortality to individual fish in the immediate area but would not result in significant impacts to fish populations or critical habitat. You should be aware that for several species, most notably Canary and Yelloweye Rockfish, any mortality from explosives is unacceptable. These two species, among others, are in a seriously depressed but rebuilding mode and their harvest is banned from all directed fishing. In addition, the directed fisheries for certain other species are limited by the bycatch allowance of Canary and Yelloweye taken in those fisheries. Any additional mortality to these two schooling species that would exacerbate their current depressed condition will only impede recovery of their stock.	The analysis in the EIS considered the impacts to specific species, and where endangered or threatened species of fish are involved, the Navy is consulting with the appropriate agency (NMFS or USFWS). This consultation will ensure that Navy activities would have no population-level effects, with consideration given to the species' status.
FINE-04	The document states under Public Safety on the same page that the analyses concluded that there would be no risk to public safety from the proposed action because of the Navy's implementation of range clearance procedures on land and at sea prior to training and testing activities. Commercial and recreational fishing for one or more species occurs along this section of the coast for the entire year, except under the most adverse weather conditions. Obviously, therefore, there's a chance that fishing vessels may be displaced, at least temporarily, from their usual and accustomed fishing grounds. How and by whom are mariners notified of an at-sea range clearance and how much lead time are they given? We would hope that the notification is more complete and streamlined than that used to advertise your recent public meeting in Newport.	The Navy does not expect any of its activities to have a negative safety impact on any fishing, commercial or recreational activities. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy would coordinate with representatives from the fishing fleets.
FINE-05	We are also concerned about the potential behavioral and/or biological impacts of your proposed expanded training program on marine mammals, particularly whales. As mentioned earlier, there has been an increasing focus among recreational charter vessels on providing the public with viewing opportunities of these ocean inhabitants. Any decreased abundance in or around our two major fishing ports as a direct result of your program is unacceptable.	The full analysis of the proposed action and its potential impacts to marine mammals was in the Draft EIS/OEIS in Section 3.9. The conclusion of this analysis was that there would be no population-level effects on any marine mammal species.
FINE-06	• It is unclear from reviewing the executive summary where most of the training/testing will occur and what time of year it will take place. Are any of your activities planned for nearshore waters (shelf) or are most scheduled for offshore (slope)?	The proposed activities would take place throughout the year with few seasonal variations. One potential seasonal activity would involve the portable undersea tracking range, which would likely be installed temporarily from June through August.  Most activities occur more than 12 nm from shore.
FINE-07	While we are not saying "not in our backyard", we are concerned about any significant economic impacts that your proposed activities may have on our local commercial and recreational industries. Our fleets are currently saddled with a myriad of regulations including time and area openings that impose seasons as short as 12 hours (halibut). If one of you at-sea range clearance procedures was implemented during a short season opener such as this it	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface

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	would have severe economic consequences to the industry.  Finally, our group meets once a month to discuss issues of concern and to advise the Lincoln County Commissioners. Membership of the group represents all segments of the industry. We would welcome the opportunity to meet with one of your representatives to discuss your proposed program expansion. We would also serve as an excellent conduit, passing along information that you make available to the industry.	ship activity proposed is not significantly different from the level of activity over the past several decades.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Your interest in meeting with the Navy has been received by appropriate personnel.
Fishermen's Wharf- 01	We are a family owned local fish market. Our livelihood depends on the local fishing fleet to supply us with fresh fish. Every year the season changes on catch. January thru August is crab season, the crabbers are usually within 3 miles of the beaches. The drag boats do their thing most of the year, we do get some of their catch but the fish plants rely on them.  Albacore Tuna is a major catch for our port! This starts in June or July and can run through October. The fleet can be 500 miles out or usually around 125 miles out. The Tuna come in from down south and go with the current up north. They probably swim past your ships, although blowing stuff up in the ocean may divert their migration.  I was in the Coast Guard and thank all those men and women that serve In our military. I also realize the training needed to be on the cutting edge.  Although we as citizens also need to be able to make a living as well, hopefully you can do your War Games in an area that would not hinder both parties from accomplishing their tasks needed to function in these United States.	The potential economic impacts of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries.
Flum-01	Please protect our ocean from Navy Testing. We live in one of the four most productive Ocean areas in world and the testing would be detrimental to this ecology.  The future of the oceans depends on non-polluting uses and wise use of our resource. Potential impacts could cause a rise of ocean temperature. Testing and pollution of chemicals will impact all marine life. Sonar is also harmful to the marine animals and no loss is acceptable, in order for the Navy to play war games. Use your considerable moneys to clean up the environment, instead of destroying it.	This comment has been duly noted. The EIS/OEIS study has not found any evidence of a change in ocean temperature as a result of the implementation of the Proposed Action or by the continuing of baseline activities.  A complete report of marine mammal strandings and mortalities was included in the Draft EIS/OEIS as Appendix E.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Ford-01	We write with all due respect and sincerity, and speak even from the heart of a Navy submariner veteran- Please do not "take" our fellow creatures who share the environment with us. They are not mere collateral damage-they	This comment has been duly noted. Specific comments addressed below.

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	are soul filled mammals that are trying to do what they have done for thousands of years – innocent bystanders! We know you must train for US security but not beyond where you are now. Please look at the deeper principal.	
Ford-02	PETITION TO STOP THE PROPOSED NAVYWARFARE TESTING PROGRAM EXPANSION &THE KILLING OF 32 SPECIES OF MARINE MAMMALS OVER 5YEARS IN THE PACIFIC OCEAN Whereas, a wide variety of marine mammals have already died due to Navy Warfare Testing of Weapons currently underway in the Hawaiian Islands, the Mariana Islands, the Pacific Ocean off the coastline of Oregon, Washington, Southern California, and other areas where testing is now conducted in both the Pacific and Atlantic oceans; Whereas, the Navy proposes to expand its NWT Range Complex warfare testing range to encompass more land areas of Oregon, Washington, Idaho, California, and the Pacific Ocean; (http://nwtrangecompexeis.com/Documents.aspx Navy Environmental Impact Statement_)	A complete report of marine mammal strandings and mortalities was included in the Draft EIS/OEIS as Appendix E.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned
		aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Ford-03	Whereas many chemicals, like white phosphorus, used in this program are toxic to humans, marine mammals, all wildlife, and birds;	All of the materials expended during proposed Navy activities, and their byproducts, are described in Sections 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, and 3.9. The analysis included in these sections pertains to potential effects to the species described.  White phosphorus is not used in the NWTRC and is not part of the
		proposed activities.
	Whereas, the Navy has violated NEPA laws by not informing the majority of the citizens of the United States about this program,	The claim that the Navy failed to inform the public is baseless. The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Ford-04		In addition to the thorough notification efforts, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	Whereas the Navy admits that there are severe declines in some marine mammal populations; Whereas, the Navy will "take", harm, maim or kill approximately 2.3 million	As described in the Draft EIS/OEIS in Tables 3.9-11 and 3.9-12, acoustic modeling of the proposed action estimated a total of 129,588 annual exposures from all sources. Several clarifications to the comment are
Ford-05	marine mammals per year over five years;	important to note:
		<ol> <li>Over 5 years, this number would total 647,940, not 2.3 million;</li> <li>Greater than 99% of these exposures are "behavioral" exposures only,</li> </ol>
		resulting in no direct injury to the marine mammal; and

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		3. No mortalities of any marine mammal species is expected as a result of all Navy activities in the NWTRC; and
		4. These numbers are computer modeling estimates that do not consider that the Navy's mitigation measures would reduce these numbers even further. Mitigation measures are described in Section 3.9.4; Marine Mammals, Section 3.8.3; Sea Turtles, and Chapter 5.
Ford-06	Whereas, the Navy will disrupt the fishing and whaling tourist industry near some of their weapons test areas in the Pacific Ocean;	The Navy does not expect any of its activities to have a negative impact on any fishing, commercial or recreational activities. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
r oru-oo		Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
	Whereas, there are sensitive marine areas in the Pacific Ocean which need to be preserved and protected;	Please see response to #3 above.
Ford-07	Whereas, airborne sky obscurants like toxic fog oils, red phosphorous, white phosphorous (which is toxic to both humans and marine life), and other military test chemicals can drift and contaminate ocean and land areas;	
Ford-08	Whereas, bomb blasts in the Pacific Ocean, and sonic booms over land areas could trigger earthquakes (sonic booms have caused damage to homes in the past, in California and other states);	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." (http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&nextRow=next)
Ford-09	Therefore, we the undersigned, demand that our local, county, state, and federal representatives take immediate action to stop the Navy warfare testing expansion in the Pacific Ocean, Idaho, Washington, Oregon, and California, and the "taking" of marine mammals.	The Navy shares your concern for marine life. As described in the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts.
	Act Today-Navy E.I.S. Public comment Deadline is April 13, 2009. http://www.nterangecomplexeis.com/NtrcCommentForm.aspx We further demand that NOAA, the National Marine Fisheries Service, and the U.S. Department of Commerce stop any attempts by the Navy to "take", kill maim or harm any marine mammals in the Pacific Ocean. Act Today-NOAA Public Comment Deadline is April 10,2009. Our goal is 10,000 signed petitions by May 2009	Also, the National Marine Fisheries Service is a cooperating agency with the Navy in this EIS/OEIS.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.

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Fort Bragg-01	The Fort Bragg City Council would like to request that the United States Navy extend the comment period for the Northwest Training Range Complex EIS for at least an additional 30 days and that a public meeting be conducted in Mendocino County, California to provide public information about the project and to obtain comments from interested parties.  We believe that the public notification regarding this project was inadequate and evidenced by the fact that the City of Fort Bragg was not notified of the February 2, 2009 public meeting held in Eureka, California. Furthermore, a copy of the Draft EIS has not been made publicly available at any location in Mendocino County, despite the fact that the Northwest Training Range Complex includes areas off of the Mendocino County coast.  Please understand that our community is vitally concerned about activities in coastal waters that may have an impact on navigation and/or marine resources. We request that additional time be granted to allow interested parties to comment on this project.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Mendocino County is located outside the NWTRC and fell outside of the geographic boundary for the placement of the document in libraries for public review. Also, electronic copies were available online and copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F. Finally, the Draft EIS/OEIS has been available for download since December 2008 from the NWTRC EIS website at: http://www.nwtrangecomplexeis.com
Fowels-01	I oppose an increase in training by the Navy on Whidbey Island because of the military air traffic over the city of Anacortes,	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Fowels-02	P.S. The website comments form at www.NWTRangeComplexEIS.com does not function.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Fowels-03	P.P.S. I hope that the telephone logs of complaints from Anacortes citizens are made part of the record.	This request is outside the scope of this EIS/OEIS.

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Friday-01	As you are I'm sure aware, several local newspapers have run stories on the increased aircraft operations that are slated to begin in the future at Whidbey NAS. The Port of Friday Harbor would very much like to voice its concerns over these increased flights. San Juan Island and the Town of Friday Harbor lie directly beneath the Runway 14 approach path and even now get the occasional passage of military aircraft at low altitude and high noise volume penetrating our area. With the reported increase in traffic, I'm afraid we could only expect more of the same.  People live on San Juan blend because of the low background noise and the feeling of being somewhat apart from the hustle and noise of the. big city, Creating noise contours in the range proposed would eliminate this sense of peace and serenity, As the airport manager, I receive noise complaints when a Cessna 206 flies too low. Can you imagine what an EA.·18 "Growler' will generate? We have worked very hard with our island pilots and with our commuter and charter pilots to follow our noise abatement procedures and have finally deve1oped a pilot community of considerate aircraft operators that try not to infringe on the special quality of life that is the San Juan Islands. To allow low-level over·f1ights and approaches of these proposed aircraft will undo everything we have gained.  While we support the bard work and dedication of our military, we cannot support this mission.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Friends of Grays Harbor (FOGH)-01	FOGH is a broad-based 100% volunteer tax-exempt 501(c)(3) citizens group made up of crabbers, fishers, oyster growers and caring citizens. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of Washington's estuaries and ocean coastal environments. The goal of FOGH is to protect the natural environment, human health and safety in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment. FOGH knows that organizations and individuals such as Natural Resources Defense Council (NRDC), Friends of the Earth (FOE), Olympic National Park, the International Fund for Animal Welfare, People for Puget Sound, Beam Reach Marine Science and Sustainability School, Jean-Michel Cousteau, Val Veirs (President of the Board, The Whale Museum), Grays Harbor Audubon (GHAS), Surfrider Foundation, Dr. David Bain, noted marine mammal expert, and others will be submitting separate comments to your office on this review document, often including technical evidence and/or declarations of fact. FOGH may from time to time in these objections refer to these comments and materials and FOGH hereby incorporates by reference all of the comments, declarations and materials submitted by these organizations or by FOGH members or partners.  Although FOGH is generally in support of limited Coast Guard and Naval exercises along the coastline of our State, we strongly object to the expansion of the training as proposed in the subject documents. Our resource industries on the coastline of Washington include crab, shellfish, fin fish, aquatic plants and aquatic animals in addition to the relatively pristine nearshore habitat that is a magnet for watchable wildlife and tourism. As	The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.

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	populations of humans grow and their encroachment on the symbiotic relationship to ocean, estuaries, rivers, streams and land becomes further exploited, we must raise concern.	
	We appreciate that the Navy produced wordy documents of significant bulk, however we question the content and whether these documents were to explain the impacts or merely present the public with an onerous task to review some 1,700 pages of acronyms and confusing statements.	
	Statements in the EIS/OEIS often refer to data that appears to be dated or simply dismissed because there is no data, therefore there must be no impacts. Cumulative impacts is an important concept in the intent of the NEPA process and it does not appear that the Navy research has satisfied this intent. Rather it appears that the document has been written to support a conclusion that suits the outcomes preferred by the Navy, rather than those which would independently analyze the effects of the actions taken.	
	The vastness or "sheer size of the Range Complex" is often sited as a reason that there will be "no significant impact and no significant harm" Another frequently used canard is "no studies have established effects of cumulative exposure." This appears to be a reoccurring theme which is used as a justification for soldiering ahead towards an unwise outcome.	
	A recent study by marine ecologist James Proter, associate dean of the Odum School of Ecology at the University of Georgia reported that feather duster worms, sea urchins and various types of coral found near bombs and bomb fragments contained high levels of carcinogenic material – in some cases 100,000 time more than what is considered to be safe for commercially edible seafood. It stands to reason that any filter feeder, such as clams, oysters, or organism that feeds on such will also be affected. The Navy already admits that some of the 20 mm CIWS (Close-in Weapon System) rounds fired into the Washington coast region may contain depleted uranium (DU). The half-life of DU isotopes is 244 thousand years for 234U, 710 million years for 235U and 4.46 billion years for 238U.	The Navy has used numerous peer-reviewed research articles in its analysis on effects of expended materials. The article described examines an area off of Isle de Vieques with a density of munitions potentially thousands of times greater than that in the NWTRC. The article also provides insufficient details to be useful in this analysis.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the
FOGH-02	An Army training manual issued by the Pentagon warns that anyone who comes within 25 meters of any DU-contaminated equipment or terrain wear respiratory and skin protection and further says that "contamination will make food and water unsafe for consumption." We presume that DU in seawater should cause concern for marine organisms and possible increases in dangerous levels of toxic substances.	earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	What is the effect of munitions on benthic organisms and how can seafood consumption safety be ensured with an increase in the Naval training excises? Increased training and exercises should not proceed before there is definitive research on the impact over time of US Navy munitions testing and discard of munitions material off the Northern Washington coast on benthic and invertebrate food chains. This needs to be properly assessed for fish, crab, clams, birds, mammals and other organisms which utilize our oceans and nearshore habitats.	
FOGH-03	While is it a noble goal to train personnel in an area that is close to home, so	The Navy does not expect any of its activities to have a negative impact

they can be near their families and support groups, it is not acceptable to trade that convenience for the potential college of the resource communities livelihoods. We strongly object to the expansion of the Northwest Training Range Complex.  Range Comp	ID	Issue Text	Response Text
and the portable underseat tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.  Please accept the following comments from Friends of the San Juans ("Friends") in response to the Draft Environmental Impact Statement for Navy Training Operations in the Northwest Training Range Complex ("OEIS") that the Department of the Navy noticed December 30, 2008. Friends is a 501 (bg/3) non-profit organization whose mission for 30 years has been to protect the land, saw, water 6 invability of the San Juan Islands and the Northwest Straits through education, citizen involvement, science, and law. Friends is a membership organization based in Friday Harbor, San Juan Island, and representing approximately 2000 members.  Friends of the San Juan Islands and the Northwest Straits through education, citizen involvement, science, and law. Friends is a membership organization based in Friday Harbor, San Juan Island, and representing approximately 2000 members.  Friends so fitnitian unit and feet operational readiness. Fortunately, if structured intelligently, this training need not compromise ecological integrity for the sake of military preparedness. However, a meaningful analysis of potential environmental Pioty Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expansion of the Northwest Training Range Complex ("NNTRC"). The DEIS published by the Navy does not achieve this meaningful analysis of potential environmental Pioty Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expansion of the Northwest Training Range Complex ("NNTRC"). The DEIS published by the Navy does not achie		trade that convenience for the potential collapse of the resource communities livelihoods. We strongly object to the expansion of the Northwest Training	restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for
("Friends") in response to the Draft Environmental Impact Statement for Navy Training Operations in the Northwest Training Range Complex ("DEIS") that the Department of the Navy noticed December 30, 2008. Friends is a 501 (c)(3) non-profit organization whose mission for 30 years has been to protect the land, sea, water & livability of the San Juan Islands and the Northwest Straits through education, citizen involvement, science, and law. Friends is a membership organization whose mission for 30 years has been to protect the land, sea, water & livability of the San Juan Island, and representing approximately 2000 members.  Friends is fortunate to have a former naval officer among our Board Members. With his advice and counsel, Friends has an appreciation for the Navy's strategic national responsibilities and need for realistic training requirements to maintain unit and fleet operational readiness. Fortunately, if structured intelligently, this training need not compromise ecological integrity for the sake of military preparedness.  However, a meaningful analysis of potential environmental impacts pursuant to the National Environmental Policy Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expanding the range complex, but to continue training in the same area as they have since World War II.  Friends of the San  Juans (Friends)-01  Friends of the San  Juans (Friends)-01  Friends of the San  Juans (Friends)-01  A ladequate Evaluation of Marine Mammal Impacts and Measures for Their Protection.  Friends-02  Friends-02			and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have
Friends of the San Juans (Friends)-01 requirements to maintain unit and fleet operational readiness. Fortunately, if structured intelligently, this training need not compromise ecological integrity for the sake of military preparedness.  However, a meaningful analysis of potential environmental impacts pursuant to the National Environmental Policy Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expansion of the Northwest Training Range Complex ("NWTRC"). The DEIS published by the Navy does not achieve this meaningful analysis, and thus must be revised in significant detail prior to publication of the Final Environmental Impact Statement ("FEIS"). In addition to the substantial errors and omissions that the NRDC and others (and in which Friends concurred) identified in their comment letter submitted March 10, 2009 ("NRDC letter"), the Navy must address the omissions below.  A. Inadequate Evaluation of Marine Mammal Impacts and Measures for Their Protection.  No sonar training activities are proposed in this EIS/OEIS to take place within Puget Sound.		("Friends") in response to the Draft Environmental Impact Statement for Navy Training Operations in the Northwest Training Range Complex ("DEIS") that the Department of the Navy noticed December 30, 2008. Friends is a 501 (c)(3) non-profit organization whose mission for 30 years has been to protect the land, sea, water & livability of the San Juan Islands and the Northwest Straits through education, citizen involvement, science, and law. Friends is a membership organization based in Friday Harbor, San Juan Island, and representing approximately 2000 members.  Friends is fortunate to have a former naval officer among our Board Members. With his advice and counsel, Friends has an appreciation for the	The Navy disagrees with the assertion that the Draft EIS/OEIS "does not achieve this meaningful analysis" as required by NEPA.  The Draft EIS/OEIS fully complied with NEPA in its thorough analysis of the potential impacts of the Navy's proposed activities.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have
to the National Environmental Policy Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expansion of the Northwest Training Range Complex ("NWTRC"). The DEIS published by the Navy does not achieve this meaningful analysis, and thus must be revised in significant detail prior to publication of the Final Environmental Impact Statement ("FEIS"). In addition to the substantial errors and omissions that the NRDC and others (and in which Friends concurred) identified in their comment letter submitted March 10, 2009 ("NRDC letter"), the Navy must address the omissions below.  A. Inadequate Evaluation of Marine Mammal Impacts and Measures for Their Protection.  No sonar training activities are proposed in this EIS/OEIS to take place within Puget Sound.		requirements to maintain unit and fleet operational readiness. Fortunately, if structured intelligently, this training need not compromise ecological integrity	
Friends-02 Protection. within Puget Sound.		to the National Environmental Policy Act ("NEPA") is critical for developing sufficient ecological knowledge to understand how to avoid impacts associated with the Navy's proposed expansion of the Northwest Training Range Complex ("NWTRC"). The DEIS published by the Navy does not achieve this meaningful analysis, and thus must be revised in significant detail prior to publication of the Final Environmental Impact Statement ("FEIS"). In addition to the substantial errors and omissions that the NRDC and others (and in which Friends concurred) identified in their comment letter submitted March 10, 2009 ("NRDC letter"), the Navy must address the omissions below.	
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	exclude sonar training activities in the inshore waters of the greater Puget Sound, including the Salish Sea surrounding the San Juan Islands. The Southern Resident killer whale, a species listed as endangered under the Endangered Species Act ("ESA"), frequents these waters, and has in the past suffered behavioral modification in association with Naval activities.	shows that all sonar activities take place in the Offshore Area, shown on Figure 2-1 and in Section 2.1.1 to lie completely outside Puget Sound.
Friends-03	In May 2003, the USS Shoup (DDG 86) impacted the endangered Southern Resident killer whale when it conducted a mid-frequency sonar exercise while transiting Haro Strait, off the west coast of San Juan Island, Washington. Observers, both onshore and afloat, saw numerous porpoises and killer whales appear to stampede simultaneously in response to an electronic noise, audible to humans, echoing through the Strait. Field biologists on the scene reported observing: (1) a pod of endangered orcas clustering near the shore and engaging in very abnormal behavior described as consistent with avoidance; (2) a minke whale "porpoising" away from the ship; and (3) Dall's porpoises fleeing the vessel in large numbers. Eleven harbor porpoises-an abnormally high number given the average stranding rate of six per yearwere found dead on a number of beaches in the area several days to weeks after the exercise.  A protection zone would also avoid undermining local orca protection efforts. San Juan County, in an effort to protect our Southern Resident killer whales, created an ordinance in 2007 that established a vessel exclusion zone around orcas as a temporary measure until federal regulations could be formulated. Ordinance No. 35-2007 (Sept. 11,2007). Whale watching vessels, in conjunction with incidental encounters by private boats, create substantial amounts of noise which can disrupt feeding, nursing, and social interactions of the whales. Chronic high marine noise levels have been implicated along with a declining food supply as primary factors in the documented decline in the number of resident orcas. A prominent Killer Whale behavioralist, Ken Balcomb, has identified sonar as terrifying and confusing to marine mammals and indicates that it might induce them to beach themselves or otherwise try to escape from their natural habitat. Michelle Ma, U.S. Navy Seeks to boost practice exercises off West Coast, in region, (March 8, 2009) (found at http://seattletimes.nwsource.comlhtm111ocalnewsl2008827019_navy08m.htm 1).	For a complete analysis of the May 2003 incident involving the USS Shoup, please see Appendix E, Section E.1.6.2 of the Draft EIS/OEIS. Several points of the comment are clarified in the appendix.
Friends-04	All inshore waters of Greater Puget Sound, including San Juan County and the Straits of Juan de Fuca and Georgia should be sonar exclusion zones except in time of active maritime hostilities within or near CONUS waters. In addition, limiting, curtailing, or relocating sonar exercises in Continental Slope waters, submarine canyons and banks, and outer coastal waters from the shoreline to the 50 fathom contour should be standing orders when marine mammals are present.	As the Draft EIS/OEIS states, and as stated in public articulations of the professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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		impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Friends-05	In addition, to better respond to the presence of marine mammals generally, the Navy must adopt more effective measures than visual observation for detecting those animals. Reliance on visual monitoring by lookouts or bridge personnel for the presence of marine mammals is difficult in most sea states, and nearly impossible under nautical twilight and nighttime conditions. Aircrew of maritime surveillance aircraft, despite other primary duties, if trained and tasked to observe and report marine mammal sightings prior to, during, and after exercises, would greatly enhance and increase the reliability of marine animal detection in operational areas. Use of these assets could significantly reduce ship strikes of whales, result in the avoidance of harmful sonar use, and reduce the danger of ordnance interaction with marine mammals. Greater reliance on passive detection systems such as towed arrays or sonobuoys for identifying marine mammal presence would also contribute to lowered risk from harmful active sonar use or other physical hazards.	Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal Protection Act. The Navy has initiated consultation under the ESA and applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.  The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Friends-06	The proposed mitigation measures for sonar impacts fail to adequately protect marine wildlife. The very limited safety zone around a sonar source is insufficient to prevent injury or behavioral disturbance to marine mammals, as evidenced by the response of animals at a distance measured in nearly nautical miles rather than hundreds of meters in the USS Shoup incident. In addition, the Navy should adopt sonar mitigation measures that realistically reflect sound pressures below thresholds identified by scientists for the most vulnerable species present, or likely to be encountered during an exercise. These thresholds are identified in greater detail in the NRDC letter.	As stated in the Draft EIS/OEIS, the purpose of the shut-down and power-down zones is to preclude direct physiological effect from exposure to MFA sonar. The earliest physiological effects from sonar would be temporary threshold shift (TTS). As explained in Section 3.9.2.1 (p. 3.9-65) of the Draft EIS/OEIS, TTS is estimated to occur for most marine mammals at a received level of 195 dB re 1µPa2-s. For the most powerful sonar used in the NWTRC—the SQS-53C—the maximum range at which a marine mammal would receive 195 dB is 140 m or 153 yards.  As described in the discussion of Safety zones (shut-down and power-down zones) on p. 5-12, any marine mammal sighted within 1,000 yards would trigger a sequence of power reductions, and eventually a shut down by 200 yards, all well outside of the 153 yard range at which the animal would first experience any direct physiological effect. Therefore, no scientific evidence exists for expanding the existing sonar power-down and shut-down zones.
Friends-07	B. Overflight Impacts Not Fully Evaluated.  The OEIS indicates its position at page 3.5-15 that sound-generating events occur in remote areas and thus do not expose a substantial number of	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is

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	human receptors to high noise levels.  However, as aircraft transit to and from the remote or off-limit areas, they emit substantial levels of noise over otherwise tranquil areas of the southern San Juan Islands. Consequently, the FEIS must evaluate the economic impact of these significant noise levels on businesses in that area engaged in the tourism industry, as well as impacts on residents in those areas.	not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Friends-08	In addition, the DEIS assumes without analysis that continued aircraft activities at current levels will not impact avian populations on the grounds that current conditions do not cause impacts. Yet the OEIS notes at page 3.10-25 that individual birds may be injured or killed by aircraft strikes. Similarly, the OEIS takes the same, unsupported position with regard to ordnance use, underwater detonations, expended materials, and entanglement. In the absence of an evaluation of the fecundity of the various avian species identified in the OEIS, the conclusory assertion that naval activities will not affect those species on a population level does not find adequate support in light of the known likelihood of injury and deaths. Consequently, the FEIS must identify population trends of the bird species identified in the DEIS to determine exactly how naval activities will impact those populations.	The analysis provided in the Draft EIS/OEIS is complete. Rare, individual mortalities of avian species do not necessarily equate to population level effects.
Friends-09	C. Oil Spill Impacts Not Analyzed.  Although the OEIS recognizes that oil spills have contributed to the decline of species listed pursuant to the ESA, such as the marbled murrelet, it omits any analysis of oil spill impacts from its activities. The presence of heavy tanker, barge, and large ship traffic in the waters surrounding the San Juan Islands makes oil spills a continuing and constant threat. In addition, spills off coastal waters, particularly in the Olympic National Marine Sanctuary, could be devastating to a multitude of animal species, resulting in ecological and economic catastrophe for that area. Notwithstanding the Navy's seamanship skills, accidents can and do happen during individual unit and fleet exercises. The Navy should increase its diligence regarding the potential for oil spills and overboard discharges during exercises, particularly when submarines are involved. Such diligence will help avoid incidents such as the USS Topeka's (SSN 754) severing of a towline of an oil barge, and the USS Nevada's (SSNB 733) similar separation of an oil barge and tug, both off the coast of Washington. The FEIS must evaluate the potential for naval activities to lead to an oil spill, either from their own vessels, or those engaged in the significant amount of petroleum trade that passes through the proposed NWTRC.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Friends-10	D. No Assessment of Impacts to Recreational Users.  The DEIS identifies at section 3.13 the use of waters proposed for the NWTRC by recreational users, such as sport fishermen, kayakers, boaters, and other marine visitors. The DEIS does not, however, identify impacts of	The potential impacts on recreational users was analyzed in Section 3.14 of the Draft EIS/OEIS. This analysis remains in that section in this Final EIS/OEIS.

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	any of the three alternatives on those users. The FEIS should rectify that omission.	
Friends-11	E. The DEIS Does Not Assess Impacts to Tribal and Non-Tribal Commercial Fishing Operations.  The DEIS states that while impacts to fish from activities such as explosions are possible, there is a low potential for their occurrence. DEIS, at 3.7-34-38. The DEIS does not, however, justify its claim regarding the low potential for explosion impacts on fish. The FEIS must actually evaluate whether the Navy's expanded NWTRC will impact fish populations, and if it suggests that	The complete assessment of potential impacts to tribal fishing is found in Section 3.12 of both the Draft and Final EIS/OEIS.  The complete assessment of potential impacts to commercial fishing is found in Section 3.14 of both the Draft and Final EIS/OEIS.
	the proposed activities do not, must justify that position. To the extent that NWTRC activities impact fish populations, they may compromise the continued existence of tribal and non-tribal commercial fishing operations that rely on those fish.	
Friends-12	F. The DEIS Cumulative Impacts Analysis is Inadequate.  The DEIS omits a substantial amount of cumulative impacts analysis necessary to render the DEIS adequate. First, the DEIS fails to evaluate the impacts of discarding underwater debris at an increased rate well into the future. Second, the DEIS does not evaluate the cumulative impacts that its activities will have on marine mammals and fish in connection with the impacts that those species are already suffering in response to nearshore development, such as shoreline armoring and overwater structures. Third, the DEIS fails to analyze the cumulative impacts of its acoustic impacts on marine mammals, such as the Southern. Resident killer whale, in conjunction with the impacts caused by the vessel-based whale watching industry, which pursues those whales for extended periods. Finally, the DEIS does not assess the cumulative impacts that the proposed activities will have in combination with behavioral and other changes that will result from climate change. The FEIS must identify and evaluate the impacts to species likely to exist in the vicinity of the NWTRC as climate change impacts intensify and warm the waters in that area.	The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.
Friends-13	G. Conclusion.  While the DEIS offers a significant amount of verbiage to support the Navy's proposed NWTRC expansion, it does not provide sufficient environmental analysis to understand the full impacts of that expansion. Consequently, Friends urges the Navy to revise the DEIS in significant detail, as identified above and in greater detail by other commenters, prior to publication of an FEIS.	See response to specific comments above.
Gaab-01	It is difficult, if not impossible, to respond substantively to the NWTRC DEIS, as copies were not made available to respond effectively. I live in the largest population center on the Oregon Coast. We were not informed that the EIS process was even taking place. The deadline for comments on the [not to be seen] DEIS was only extended at the urging of our legislators. Where were the scoping meetings and public hearings for a proposal that will effect humans, marine life and our environment so greatly? I vehemently object to the entire process the U.S. Navy has chosen to pursue concerning the	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because

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	NWTRC. The entire process should be started over and the public given the full opportunity to be included from the beginning.	comments could be submitted by mail postmarked no later than the closing date.
	I request a hard copy as I am not able to view CDs.	An additional meeting was held in Tillamook, OR on February 26.
	I am opposed to your expanded new plans for weapon testing in the ocean off the Mendocino coast & the Northern Pacific Coast. My reasons are environmental degradation, with resulting job losses, to a population already stressed by a crippled fishing industry & tourist industry and last but of primary importance—the health of this population who reside on the Mendocino Coast.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Gallo J-01		Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
		With regard to the health of the public on the coast, analysis within Section 3.16, Public Health and Safety, have concluded that no impacts to the coastal population will occur.
Gallo SRK-01	As a Registered nurse, mother of 4 college level to doctorate level children, my two youngest daughters majoring at UC Berkeley & UC Santa Cruz majoring in Marine Science & Marine Biology, My Son with a doctorate in Geographical Conservation Biology & married to a physician in Medicine with our last child getting her masters in Medial Social Work, we as a family have lived in Mendocino County, raising our children on Navarro Ridge in Albion, CA. My father a fisherman & lumberjack his entire life, I feel I have a good background in not only our struggling fishing & tourist industry but environmentally educated to address this proposal. I am opposed to your expanded new plans for weapons testing in the ocean off Mendocino County & the Pacific Coast.  My reasons are #1. It is environmentally unsound—you know the endangered species that will be effected—snowy plovers, endangered brown pelicans, grey whales, bald eagles, a multitude of migratory bird species—terns, swans, Canadian gees, etcnot to mention the intertidal species—but let us not forget our food sources.	The analysis included in the Draft EIS/OEIS included the best available science for determining effects on marine life. As an example, the acoustic modeling used to derive sonar exposure estimates was developed in coordination with the National Marine Fisheries Service (NMFS),a cooperating agency on this EIS/OEIS. NMFS is responsible for the protection of marine specie, and in consultation with the Navy, will consider all potential effects to marine mammals and threatened and endangered species from the Navy's proposed action.
	#2 It will devastate any hopes of a fishing industry's recovery, not to mention abalone, steelhead, salmon, seaweed & clams, crab all our food sources.	The Navy is very aware of concerns from fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities
Gallo SRK-02		while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.
		There are no restricted areas in the NWTRC. Normal right of way for

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		fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
		Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
		With regard to water quality concerns; the fate and transport of potentially hazardous materials were analyzed in Section 3.6 – Marine Plants and Invertebrates and Section 3.7 – Fish in the Draft EIS/OEIS.
Gallo SRK-03	#3 Our tourism is crippled already with this recession & could not sustain another blow to failing small businesses and ultimately jobs for this community.	The potential economic impacts of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting fishing and tourism industries.
Gallo SRK-04	#4 The emotional stability of this population is already showing signs medically of decomposition under these stresses. Daily I work with my husband, Dr. Gallo & his colleagues at North Coast Family Health Center a hospital based reinal health clinic and it is agreed by all the population that depends on the jobs generated by a healthy ocean are severely stressed and their health is worsening because of it.	The analysis included in the Draft EIS/OEIS includes the best available science for determining effects on marine and human life. Potential impacts associated with the proposed activities were not discussed within the Draft EIS/OEIS when the impacts lacked a sufficient nexus between activities and impacts.
	Thank you for considering my comments and please respond.	
	The three documents plus this one I submit as my "Comments on Northwest Training Range Complex EIS/OEIS Draft December 2008" Document three	The analysis included in the Draft EIS/OEIS includes the best available science for determining effects on marine and human life.
	and four are references for statements made in document one and two. In the specific "Comment" document I have used italics for my statements and underlined my recommendations. Material taken from the EIS/OEIS Draft is in quotes with section and page number noted.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Gandhi-01	I am qualified to make these statements because of: a year of college organic chemistry; eight years of immersion in "best available science" on toxic chemicals in the environment; marine species and humans. I have hundreds of documents on this topic that have been used to make comments on several draft Environmental Impact Statements. Official Comments have been submitted by this writer on topics related to: herbicides for roadside vegetation control; Salmon Plan for WIRA 6; Island County Critical Areas and Wetlands regulations and U.S. Department of the Interior's BLM EIS to apply thousands of pounds of herbicides to one million acres in Western States for Fire Suppression.	
	Reading the draft EIS/OEIS has raised my blood pressure as I experience incredibility, disbelief, skepticism and even outrage at the hubris of Former	

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	President Bush, his Secretary of Defense, the Commander, U.S. Naval Fleet and those who assembled the draft NWTRC EIS/OEIS.	
	The Navy's analysis of the potential environmental impacts to the human environment that "may" result from the U.S. Navy's Historical "No change" Alternative of ongoing practices; Proposed Actions of the preferred Expanded Alternatives and proposed increased naval activities within a greatly expanded NWTRC are severely lacking in comprehensive credible science. "Science" referenced and references are found to be old and inaccurate when compared to "best available science". Assumptions, declarations and statements extrapolated from the "science" referenced are thus found to be inaccurate. This means that historical. ongoing and preferred expanded alternatives will expose marine species, habitats, aquatic life and near shore inhabitants, i.e. people, too much greater harm than claimed by this EIS/OEIS draft. I found "scientific" studies lacking credibility with inaccurate conclusions. Whales that wash up dead on the beaches of Whidbey Island, there of been several, have to be disposed of at a hazardous waste facility.	
Gandhi-02	The draft writers' assumptions that toxic chemicals and hazardous wastes from training activities and operations would not experience bioaccumulation up the food chain to human consumption marine species and marine mammals are not based on "best available science". Southern Puget Sound Orca Whales are one of the most toxic burdened species on the planet.  As a Hanford Downwinder born north along the Columbia River in 1946 I had to research radiation in all it forms in order to overcome death by cancer from exposure to radiation. Department of Energy - DOE # TCDF58 is my number as part of the dose reconstruction project having received a minimum of2,900,000 MREMS in my sixty three years. My greatest exposure came before birth and for the first two years of life. As part of a family and community cancer cluster I scattered my 41 year old brother's ashes after he had tightened the bolts of a nuclear reactor in a submarine with paper booties for protection. Of the four out of six in my immediate family experiencing cancer, three are dead.  Radiation's "No Apparent Danger" is not true. The NWTRC EIS/OEIS Draft referencing a thirty-five year old report: "Ecological Considerations of Depleted Uranium Munitions" assembled at Los Alamos. NM weapons laboratory before the most recent generation of DU weapons were used in combat and could not possibly addresses the issues raised after nineteen years of use. Nor could claims made by the U.S. Navy or any branch of the military on the "harmlessness" of deplete uranium weapons be credible. Testing large particles of uranium does not and can not be used to say what the pulverized matter created by use ofthese weapons would do to humans or aquatic life. Depleted Uranium weapons are fourth generation nuclear weapons and their use violates several international treaties, conventions and agreements. (See www.GulfWarVets.org)  Depleted "nano particles" of exploded Uranium, which forms a poison gas, are not less harmful just because large particles in another form had tested so. Thes	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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	of National Security". (See"Experts on Radiation, document 3 of4).	
	The mists of exploding DU weapons into nano particles are no where referenced in this NWTCR Draft EIS/OEIS. One thirty-five year old of two references used large particles of uranium in the studies referenced. If they had studied the poison mists of nano particles of DU the results would have been kept secret. Military and government agents have threatened those whose investigations showed extreme cancer risk from the nano particles with loss of job, homes burned and lives were threatened. Radiation experts, Japanese investigators and medical personnel were denied entry into Iraq.	
	I've prepared a six page abstract of Experts in DU Radiation Effects" including the professional credentials of the researchers, doctors and investigators. Studies on the nano particles oftungsten are probably rare or lacking. And it maybe that the DU bombs vaporized to date that are greater than or equal to the fall out of 83,000 Hiroshima sized bombs also contained tungsten, I don't know. The radioactivity trail of the uranium was easier to track.	
Gandhi-03	"Marine Mammal Deaths and Naval Hubris" backs up the validity of my statements regarding marine mammal's deaths with references. Data provided by the draft EIS/OEIS and a document search regarding the multiple "takings", i.e. killing, of marine mammals with the use of mid-frequency active sonar use are cited.  These two documents are included as part of my comments for a total of four documents submitted as my Comments on the NWTRC EIS/OEIS draft. (Identified as document 1 of4 TmkG.)	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. Neither the Navy nor NMFS predict any marine mammal deaths or serious injuryto result from the Navy's training activities proposed in this EIS/OEIS.
Gandhi-04	"Best available science" is often not considered if it is not looked for. Washington State Department of Transportation -WSDOT proved that in their EIS process by only considering comments from Chemicals Corporations on implications or effects of potential harm for humans and aquatic species of their products. Ignored were hundreds of "best available scientific studies" proving the link between the chemical formulations used and their endocrine dysfunction aspects on species exposed. Many of the chemicals in the formulations have been linked with the feminization of males, decreased sperm counts species wide and linked with erect penile dysfunction, testicular cancer in humans and a number of other terminal diseases. Island County had the scientific findings put before them until they stopped using all herbicides for roadside vegetation control.  WSDOT ignored the endocrine dysfunction "peer review scientific studies" submitted that resulted in the Secretary of Transportation requesting an EIS process to look at issues I had raised. Ray Willard, WSDOT, contracted out the work and would not respond for months to my requests to know if the very challenges "best available scientific studies" showed were being dealt with in the WSDOT-EIS until it was too late. Washington Toxics Coalition submitted eighteen pages addressing all of the issues ignored in the EIS and WSDOT, like the Navy is likely to do, deemed the comments "too	The analysis included in the Draft EIS/OEIS includes the best available science for determining effects on marine and human life.  This comment has been duly noted.

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be dealt with. The comments were not it but rather the claim was made that arm humans or the environment.	
framing an EIS so as to not honestly ntial harm done by WSDOT is not unlike urrent NWTRC EIS/OEIS draft. This puts th ecuring a final NWTRC EIS/OEIS by the nesty conducted with a lack of valor.	
need the implications of "best available ce over seven years in dealing with WSDO elf. It took five years of work by a small using "best available science" that resulted exic chemicals on all State Routes. 2008 ion from the highest amount used in 1993.	
is not honor the concept of a Sanctuary nor many current laws and international ast National Marine Sanctuary - OCNMS. Equare nautical miles of the 122,440 and e" marine mammals if when and where the of the totally vast NWTRC area. The 140 square nautical miles but the U.S. Navy a based on inappropriate scientific studies is, marine species, their habitats or the scommon Sense.  Tries fines against anyone, agency or habitat of Chinook salmon or salmonid at in. As all of Whidbey Island near shore is explicable to this draft EIS proposal. A lawsuist hill from a small sized explosion off of staller bombs does not bode well for sis fish kill was witnessed. How many are considered, Chum salmon and Steelhead Trout with in are listed as Endangered. An additional salmon population supports the whale decline with eighteen marine mammals ecies. This delicate balance for so many are close to tipping into extinction will surely ed by the Navy's proposed "Preferred stence on using the 1.3% of 122,440 square in the tens of thousands will be eliminated the will to figure out a way to not do so. This	the entire OCNMS. Also, no explosives training occurs in the Offshore Area of the entire NWTRC within 3 nm of shore.  The analysis in the EIS considered the impacts to specific species, and where endangered or threatened species of fish are involved, the Navy is consulting with the appropriate agency (NMFS or USFWS). This consultation will ensure that Navy activities would have no population-level effects, with consideration given to the species' status.
in the tens of the will to figui	thousands will be eliminated

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	a mission as directed by the Commander in Chief, President Obama. This current draft that we are discussing was started when President Bush held that position. The whole process is flavored with the same hubris President Bush used to fabricate intelligence to take our valued troops to war against a country that had not attacked us on 9-11. Over 500,000 of those very same veterans wounded mentally or physically are currently homeless and denied health care by denying the link between military service and harm. (See www.GulfWarVets.org.)	
	In the Navy's EIS scoping process the issue is that inappropriate scientific studies are being use to imply no harm will come to marine species and environment. Humans and their environments. Thirty-five and fifty year old reports of studies are so out of date that the use of them as references to validate statements within the NWTRC EIS/OEIS contributes to the hubris that the Navy only need to carry out the form but not the substance of a valid look at what could and will in fact harm marine mammals, aquatic life and degrade the environment so valued by residents of the states impacted. If it is true and is allowed to stand that President G.W. Bush signed an Executive Order authorizing the National Marine Fisheries Service to issue	The analysis included in the Draft EIS/OEIS includes the best available science available for determining effects on marine and human life.  Pertinent references were used throughout the document. Some scientific studies that may appear outdated on the surface were groundbreaking when written and remain benchmark studies today.
	an LOA authorizing 10 million uses of the U.S, Navy's new sonar through 2014 contrary to the Marine Mammals Act ensures the Death of The Last of Earth's Whales and Marine Mammals. The hubris of authorizing the elimination of multiple marine species is a violation of multiple International Treaties, Agreements, Federal law, Federal and State Court decrees and laws of other Countries and their Court's rulings is unacceptable.  The Navy has committed critical errors of omission of "best available"	
Gandhi-06	science", obvious obfuscation of data input and study parameters with the results of science based upon inadequate or comprehensive understanding of the true facts. This disregard of the implications of the effects of these toxic chemicals for multiple species generational integrity is unacceptable. Even if the makers of these agents of death had to fabricate or misdirect research efforts to gain approval and if this was done in the "Name of National Security" no one outside of "Need to Know" would be allowed to "Know".	
	Manipulation of science has been done in the past by various aspects of government and the chemical industry. The only lawsuit filed against the Manhattan Project was to protect duPont Chemical Ltd of liability for killing a goat and all life on a New Jersey farm with a fluoride release from their plant making it for atomic bombs. Dr. Harold C. Hodge, chief of fluoride toxicity studies for the Manhattan project became the leading national proponent of fluoridating public drinking water. Dr. Hodge was sent to New York University at Rochester to fabricate science to prove fluoride harmless. Fluoride is not harmless. Reference "Project Censored" USC -Sonoma.	
	The ultimate result of shortening the lives of those who will be exposed to the toxic exhaust: weapon fragments: radioactive nano particles: salt water columns and bottoms littered with very toxic chemicals. hazardous waste and other byproducts of the U.S. Navy conducting training activity is unacceptable. No valid scientific studies were conducted to prove the	

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	assumptions that these materials will not harm marine life.	
	This lack of ingenuity, creative thinking, innovation and alternatives is disappointing given the good intentions of the majority of our military service naval commanders, officers, service men, women, support staff and support industries. Where is the American can do to preserve life? Has the expectation of acceptable collateral damage of innocents been woven into the military thinking of those we expect to protect us from enemies foreign and domestic?	
	I do not dispute the mandate given to the U.S. Naval Commander, U.S. Pacific Fleet. I was raised with patriotic pride as the step-daughter of a Korean War Navy veteran; daughter of thirty year Coast Guard cook; sister of brother serving the Navy for six years. My nephew, 20+ years with Army Special Forces has been in Iraq since 2003. I am the grandmother of an Air Force Registered Nurse in Germany and second cousin to Robert Hanley, a former Commander in the Sixth Fleet. I have the highest regard for the U.S. Navy and all who serve our country whether by water, air or land.	
Quality 97	I do object to the process, road blocks with the comment computer and limited notice among other issues. Did you confer with Vice President Cheney on how to keep the process secret? The Senators and four Congressmen from Oregon would probably agree as they have written to the Secretary of the Navy to extend the Comment Period to April 11, 2009. They did so citing inadequate notice, restricted comment time and inadequate	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of
Gandhi-07	public meetings. Thank you for extending the comment time if not to April 11 at least to March 11th.  My remarks are limited as I have only had time to read one and one/third volumes. Based upon what I have read and combined with what I know and am providing is but a small part of that knowledge.	notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Gandhi-08	I request that there be no expansion beyond the mis-named "No Action" Alternative and that the Navy go back. examine and re-evaluate assumptions being made. I do not know if the Navy ever did a scoping process for the "No Action Alternative" or produced a properly reviewed EIS/OEIS or are attempting to grandfather in what is already taking place. Further investigation of the potential impacts of operating in near proximity to Endangered Species using technology that harms and kills are needed to be carried out by independent "best available scientific studies".	The Navy completed a scoping process as described in Section 1.6.1 of the Draft EIS/OEIS and in Appendix F of this Final EIS/OEIS. The 'baseline' of activities is discussed in Chapter 2, Section 2.3, where the action presented represents a regular and historical level of activity on the NWTRC to support this type of training and exercises.
Gandhi-09	Knowing that harm and death occur, having gone to the trouble of getting an exception not granted any other organization or government body; knowing that Endangered Marine Mammals follow Endangered salmon through, about and within the NWTRC Study Area activities should be suspended in the areas of sensitivity mid April through mid October. Areas of sensitivity are the traditional ocean to rivers path ways used for hundreds of years by resident aquatic species.	Seasonal restrictions such as recommended in the comment were considered in the Draft EIS/OEIS in Section 5.2.1.5 – Alternative Mitigation Measures Considered but Eliminated. This section explains why this measure fails to provide any added protection to marine species.
	Unless and until recommendations made by Howard Garrett of the Orca Network, the National Resources Defense Council along with the Organizations that signed their submission, Conservation North West and my	

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	objections and questions can be addressed on the inadequacy of the NWTRC EIS/OEIS Draft training should stop and or be limited within 300 miles of the Olympic National Marine Mammal Sanctuary. Until these recommendations and questions can be address as submitted by the above organization no expansion should be allowed. Until recommendations can be put into place and appropriate training can be given to Sonar personnel all training should be suspended in critical areas rather than use technology that the Navy knows kills multiple Endangered Species.	
Gandhi-10	Unless you can clone Clark Kent/Superman to be a look out with super sight and listening with super hearing for species that seeks not to be found to be present on sonar duty on all vessels the U.S. Navy should stop "takings" of multiple Endangered Species. How would a "look out" work on submarines? Current sonar technology does kill and its effects are heard much further than the draft EIS/OEIS admits. A Navy sonar expert has research that shows the sonar is heard 300 miles and maybe more from its source. This was not mentioned in the EIS/OEIS draft.  Please find the will, intelligence and ingenuity that the U.S. Navy is known for and find a way that training can occur and Endangered Species are not "taken" in the process. When did it become okay to kill, harm or damage that which the U.S. Navy is mandated to protect? The lives, environment. way of life and economic violability of multiple communities along the West Coast and within Puget Sound depend upon each of you to find a way to both protect and defend our quality of life. This means living in harmony and without harming our varied marine species, especially those that are threatened and or endangered.	The Navy's mitigation measures involving lookouts apply only to surface ships and not to submarines.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Gandhi-11	For my part I will continue to communicate to the President, Secretary of State and United Nations members to find non-violent ways to achieve peace and justice. And I will pray that no person serving his Country in the Military will have to kill or be killed.  Please remember that no member of any aquatic species has ever sought to "take" the life of anyone in the U.S. Navy. Please find a way to not have to "take" their lives.  I agree with the Comments submitted by the National Resources Defense Council, Organizations who signed on to their comments, Conservation North West. Please implement their recommendations along with the very intelligent and knowledgeable comments and suggestions made by Howard Garrett.  Please answer the questions I have raised. Please check out the complete reports I have referenced in my two supporting documents.  Thank you for the opportunity to be a part of this process in submitting my four part comments to the NWTRC EIS/OEIS Draft December 2008. I will be sending copies of these documents to my Congressional Representatives, President Obama, other organizations and the media.  More than the average person I know the importance of a well trained and mission ready Navy. I have studied extensively U.S. Strategic National	The Navy has considered and responded to every comment received on the Draft EIS/OEIS.  With regard the 'take' of Marine Mammals- There are different levels of "take." The Navy does not anticipate any mortality takes, but only harassment takes.

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	Security theory and tactics; the moral and political thought of Mahatma Gandhi; participated in 1988 at Oxford as part of the Secretariat of the Global Forum of Religious and Parliamentarians on Human Survival; attended the Global Forum in Moscow in 1990; am the former wife of a Mahatma Gandhi relative; six of my family have served in the military and I joined the Veterans of Foreign Wars Auxiliary in 1970.	
	I support our troops and I believe that with the will to do so military personnel can do anything. Please create a win win and find ways to train without killing endangered species. The NWTRC EIS/OEIS Draft 2008 is a good beginning but does not represent the quality of work that I know the Navy can perform. I have given weeks of my life that I could have used to promote my just published book. A tenth surgery scheduled this month could be fatal. I have given above and beyond please do the same. Thank you.  Conclusion of Part 1 Introductory Remarks.  Part 2 Comments	
	Part 3 Experts in Radiation	
	Part 4 Marine Mammal Deaths and Naval Hubris.	
Gandhi-12	Comments to NWTRC EISIOEIS draft December 2008 to conduct training, research, development, testing and evaluation of military hardware, personnel, tactics, munitions, explosives or electronic combat systems. NW Range Complex encompasses more than 122,440 square nautical miles of ocean and inland waters of Puget Sound. The range complex also includes more than 34,000 square nautical miles of airspace.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this EIS/OEIS. (See #3 of CEQ's Forty Most Asked Questions).
	Achieving the Navy's mandate and mission by any means necessary begins by mislabeling the "No Action Alternative" as it is not a "No Action Plan" but continued training as usual.	
Gandhi-13	At the least the U.S. Navy must not expand and adopt "Alternative 1 or 2".  Additionally the training must not take place within the Olympic Coast National Marine Sanctuary.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Gandin-13		The Navy complies with the National Marine Sanctuaries Act and specifically to the regulations of the OCNMS. The restrictions that apply to the OCNMS were described in Table 6-1 (p. 6-3) of the Draft EIS/OEIS.
	A search for "best available science" needs to be included even when it proves harm can come from standard operational procedures. Comments	The analysis included in the Draft EIS/OEIS includes the best available science available for determining effects on marine and human life.
Gandhi-14	from the Orca Network need to be implemented and addressed. Comments from the National Resources Defense Council and organizations signing on to their comments need to be taken into consideration, investigated and recommendation adopted.	The Navy has considered and responded to every comment received on the Draft EIS/OEIS.
Gandhi-15	Volume 1 p. 3.6-1 Not in the Glossary but buried with the text of the EIS/OEIS draft was found the definition of "littoral zone". As being: "near shore habitats that includes: islets, headlands, rocky inter-tidal areas, bottom-dwelling algaes (e.g., kelp forests), sea grass beds, soft substrate, estuarine and coastal salt marsh wetland, fjords and beaches. Mid-littoral beach is	The Navy does not claim any right to all littoral zones within the NWTRC, nor is the Navy performing a 'taking' of land within the NWTRC. Restriction of access within certain areas of the NWTRC does not amount to a federal 'taking' of property.

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	alternately submerged and exposed for moderate periods of time.	
	In other words the NWTRC Study Area from within Puget Sound and south to California includes and "takes" all beaches and coastal salt march wetlands as would be DESIRED TO USE by the Naval Command. Tourists, residents, seed gatherers, clam diggers and fishermen could be restricted from their usual and accustomed shore line beaches. This could produce economic harm to multiple communities in all states on the West Coast.	
	Alternative 2 is the Navy's preferred alternative because it would fully support the type and frequency of activities it believes are required to achieve complete Fleet readiness and allow the U.S. Navy to carry out its mission in the Pacific Northwest. RDT&E activities in the NWTRC are comprised primarily of unmanned aerial system (VAS) and underwater vehicle system activities.  Alternative 2 includes all elements of Alternative 1, plus:	The entire Draft EIS/OEIS describes the Navy's ability of the Navy to maintain the long-term viability of the range complex while protecting human health and the environment, which includes all species, endangered and otherwise.
Gandhi-16	Increase the level of training activities over levels identified in Alternative 1; and Implement range enhancements, including: new air and sea surface targets; new electronic signal emitters; development of a small-scale underwater training minefield, and development of a portable undersea tracking range.	
	But missing in this Alternative is the ability of the Navy to maintain the long-term viability of the range complex while protecting human health and the environment not to mention the viability of fifty-one species of threatened or endangered salmon, aquatic species and marine mammals.	
	Acknowledge that the Navy is not equipped with the properly trained personnel capable of detecting multi-species who do not want to be detected This is especially true when conducting training war games with multiple vessels, sonars and disrupted waters.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.
Gandhi-17	Make a commitment to further train sonar specialists to be able to detect the very elusive endangered marine species. Do not rely on high frequency sonar technology to find marine mammals until independent researchers have determined its ability or not to harm the marine mammals in seeking to protect them.	Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
Gandin 11		Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Gandhi-18	Volume I: Hazardous Materials 3.3 P 3.3-14 Bomb and expended ordnance on the ocean floor would be "widely scattered" and have negligible adverse impacts and possibly some slight	To show the effect throughout the entire area, the approach described in the comment was taken in Section 3.3. To illustrate the potential effect to various species, Sections 3.6 through 3.9 consider higher concentrations based on typical exercises where either a large number of expended

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	benefits.	items are used, or large-sized expended materials are used.
	To average the dispersion through out the whole NW Training Range does not make logical sense. To make the statement that "possibly some slight benefits" from bomb or expended ordnance – flies in the face of logic.	
Gandhi-19	3.3.15 Missile's solid propellant releasingammonium perchlorate, potassium hydroxide, lithium chloride and other hazardous materials are expected to rapidly disperse that local concentration will be extremely low  Are assumptions that low concentrations will not harm those species exposed to them in their natural habitat? I could not find within the references any, or especially "best available scientific studies" to back up the above claim. To average the dispersion through out the whole NW Training Range without the missiles releasing these chemicals evenly throughout the entire range is not a credible statement.  Marine Mammals are immersed in this now toxic habitat, some consuming krill filter huge amounts of sea water through their consumption body parts.  All aquatic life bio-accumulates up the food chain. I saw no references regarding the possible bonding or absorption or not of these toxic materials to algae, krill or shrimp.	See response to previous comment. Also, because these activities do not occur in concentrated areas within W-237 of the NWTRC, over time the effects will tend toward an even distribution. However, as described in the comment response above, the short-term effects of locally concentrated expended materials to species is considered.  Section 3.6 describes potential effects to plants and invertebrates, such as algae, krill, and shrimp.
Gandhi-20	3.3.17 molybdenum, titanium, tungsten or vanadium linked with the assumption that these toxic metals "will eventually oxidize into benign byproducts  Is an assumption not backed up with long term testing in comparable circumstances? No references could be found citing studies proving these heavy particles will "eventually oxidizeinto benign by-products".	Please refer to Section 3.3.1.1 of this Final EIS/OEIS, which provides a thorough description, with citations, on the fate of hazardous materials.
Gandhi-21	Depleted Uranium: 20-mm cannon shells of depleted uranium, their fragments and nano particles created when exploded are no where dealt with in the entire 1,068 pages. Claiming the depleted means the ordnance is only 60% as radioactive as uranium misses the entire point. Exploding DU weapons creates a nano particle poison gas that is carried on the wind inflicting rapid forming cancers in multiple organ systems in a very short amount of time one body at a time. These would Widely disperse within the marine environment and then work their way up the food chain to human consumption aquatic species.  This would hold true for birds, like the ones in Afghanistan sitting on a wire that all fell to their deaths with blood flowing out every orifice after exposure to DU's explosive poison gas cloud Unless the bird deaths were from a detonated nuclear bomb that a "boots on the ground" veteran witnessed both in Afghanistan and Iraq. The  Bunker Buster Nukes used in Afghanistan were encased in DU. As to whether it was the poison gas from exploded DU or the radioactive cloud from a nuclear Weapon encased in DU that impacted and killed birds and humans can not be known by this writer. Afghani walking away from the	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Also, the use of DU over land in the weapons described in the comment creates effects that can not be compared to 20 mm inert rounds fired over the ocean.

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	explosion also had blood pouring from every orifice and died shortly thereafter according to witnesses with boots on the ground in our military.	
	See www.willtohomasonline.net investigations- "US Veteran with Boots on the Ground Witnessed". And see also referenced studies in "Experts in DU Radiation" submitted with these comments.	
Gandhi-22	Volume 2: References 8 p. 8-4: Reference cited is 35years old - Hanson, W.C. 1974. Ecological Considerations of Depleted Uranium Munitions. Report LA-5559 Los Alamos Scientific Laboratory did not deal with the nanoparticiles that are created from the explosions of DU munitions. My references of credentialed experts accompany these~ comments in document called "Experts Reports of Findings on DU"  The only other reference cited on Depleted Uranium was: "Toque, C. 2006. Marine Environmental Depleted Uranium Survey Report Gosport, UK"	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gandhi-23	p 8-50 "Goertner, IF. 1982. Predication of underwater explosion safe ranges for sea mammalsIt is hard to image that munitions have not been changed or improved in 27 years. I would think that the Naval Surface Weapons Center would have more recent studies. If so then why was it that this study was referenced?	Some scientific studies that may appear outdated on the surface were groundbreaking when written and remain benchmark studies today. For example, studies related to underwater explosive effects to animals reference a net explosive weight that is used today, regardless of the advances in the weapon. It is not necessary to recreate the study today when new weapons can all be classified by this net explosive weight.
Gandhi-24	p 8-56 "Kryter, K.D. W.D. Ward, J.D. Miller and D.H. Eldredge. 1966. Hazardous exposure to intermittent and steady-state noise <i>Forty-three years</i> there isn't there a more recent study on this topic?	Yes, there has been. That is why on p. 3.9-63, where the Kryter reference is cited, the text also cites Ward, 1997. The two references, taken together, provide the full background reference material to the analysis.
Gandhi-25	p 8-87 "Rickie, B.E., RW. Macdonald, IK. B. Ford and P.S. Ross, 2007. 'Killer whales (orcas) face protracted health risk associated with lifetime exposure to PCBs,' Environmental Science and Technology, 41(18):6613-9," <i>Using Depleted Uranium with a half life of40 million years will enable uncountable marine lives to have lifetime (however shortened by the process) exposure when moving through or living near by wherever the U.S. Navy decides to use and leave on the ocean floor those fragments of radioactive weapons. Nano particiles dispersion will greatly expand the radioactive areas of the marine environment. See references in "Experts in Radiation"</i>	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gandhi-26	3.3.18 Underwater Targets. Airborne and surface emitting magnetic or acoustic signals used in training do not mention the decibels, range or potential harm to marine mammals.	The analysis of underwater sound on marine mammals and on fish was described in Sections 3.9 and 3.7 respectively.
Gandhi-27	3.3.19 Repeated at the end of multiple paragraphs: appeared to be minimal and bad no detectable effect on wildlife or sediment quality <i>cites no "scientific studies"</i> over time to prove these repeated assumptions as valid.	This comment has been duly noted.
Gandhi-28	3.3.20 Torpedoes. Under the No Action Alternative this will have no measurable impact on the PACNW OPAREA environment. No statement is	The Preferred Alternative (or Alternative 2) analysis was described in the Draft EIS/OEIS in Section 3.3.2.4 – Alternative 2, the Preferred

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	made regarding the "Preferred Alternative" and the impact than increased use and exposure would have.	Alternative, on p. 3.3-34 (under "Torpedoes").
Gandhi-29	3.3.21potentially toxic battery constituents with USEPA water quality criteria for protection of aquatic life or "best available literature" cannot be exceeded once every three years. The preferred alternative would not limit exposure to one battery expended every three years. This is an omission as it is not stated how this limit would be overcome.	The excessive levels that would limit exposures as described never occur in the NWTRC, even with the proposed numbers of sonobuoys expended. In the open ocean environment, the dilution factor of vast quantities of seawater would reduce potential concentrations of lithium, lead, silver, and copper to levels that are not detectable above the naturally occurring background levels found in ocean waters. For example, as described further on page 3.3-22 of the Draft EIS/OEIS, at a distance of 5.5 millimeters from a breached lithium battery casing, lithium levels would be only 10 percent greater than natural seawater.
Gandhi-30	3.3.22 3.3.23 Explosive Sonobuoys - Potential Impacts of Detonation Byproductsin the water, the charges explode, creating a loud acoustic signal. No decibel readings or range of sound is mentioned thus omission claims no harm when in fact there very well could be. When a 4 # bomb of whatever source exploded underwater near NSA Whidbey 5,000fish floating on top plus up to 20,000 that had fallen to the bottom were killed and a law suit was filed This fish kill was witnessed How many are not? No mention of potentially massive fish kills can be found within these pages. Is it that there are no computer codes to record such events?	The potential effects of the Navy's use of underwater detonations was acoustically modeled and analyzed in Sections 3.7 and 3.9 of the Draft EIS/OEIS. The source pressure levels were considered in the analysis.
Gandhi-31	3.3.23 3.3.23 - 25 Again with underwater detonations of C-4 there is no measurement of the acoustic signal or of the number of fish or marine mammals that would swim through these regions in the five hours that these exercises take to complete. There was no mention and probably no computer input code for reporting dead fish or marine mammals sighted during or after the exercises are complete for the day in the report filed under "test results". (Governor/President Bush's No Child Left Behind achieved a no drop out rate because the computer code to record "drop outs" was eliminated)	The potential effects of the Navy's use of underwater detonations was acoustically modeled and analyzed in Sections 3.7 and 3.9 of the Draft EIS/OEIS. The source pressure levels were considered in the analysis.
Gandhi-32	3.3.24 3.3.26 .27 Aviation Fuel and Other Propellantsfuel (dumped over water west of NAS Whidbey)dissipates in the air small number of incidents. " neither have an measurable impact on the environment. Downwind of this air dissipation the breast cancer rate in San Juan County is the highest of any County in Washington State. Even the Counties closest to Hanford had less. What could be in the air that could cause thisJet exhaust fuel dumped more than a few times or maybe exhaust from ships burning bunker diesel fuel?	Navy aircraft fuel dumping in the NWTRC is a very rare occurrence, taking place only in emergency situations. U.S. Navy ships do not burn bunker diesel fuel. The full analysis of air quality impacts is described in Section 3.2 of the Draft EIS/OEIS.
Gandhi-33	3.3.25 3.3.28.29.30 Bombs. Missiles. Naval Gunfire. Targets and Countermeasures. Torpedoes and Small Caliber Rounds A repeated phrase"this increase would not have a measurable impact on the environment." This statement is contrary to reality. Yet again, no mention of the acoustic byproduct on the resident aquatic life offering and exploding these weapons ordnances are mentioned.	Section 3, to which this comment refers, analyzes the potential impacts of the hazardous materials associated with the training items listed. The potential acoustic and other effects to marine life of the Navy's use of bombs, missiles, naval gunfire, targets, countermeasures, torpedoes and small caliber rounds was analyzed in Sections 3.6 through 3.10 of the Draft EIS/OEIS.
Gandhi-34	3.3.26 3.3-31 Underwater Detonations <i>It is good news that the Navy will be</i>	The NWTRC EIS/OEIS is limited to the effects of actions that take place within the NWTRC. The potential effects of activities in Imperial Beach,

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	relocating this process to Imperial Beach, CA from the near shore of Island and Jefferson County but not good news for marine life off of Imperial Beach Implications for acoustic harm to marine life from underwater detonations in Imperial Beach, CA are not spoken too nor addressed in the No Action Alternative let alone in the Preferred Alternative.	California are being analyzed in the Silver Strand Training Complex EIS. For the status of that EIS, please visit: <a href="http://www.silverstrandtrainingcomplexeis.com">http://www.silverstrandtrainingcomplexeis.com</a>
Gandhi-35	3.3.27 3.3-32 -37 Repeated"will have no impact on the environment from bomb, missiles, etc" is not backed up with scientific proof of remarks and assumptions. Again no mention of the acoustical impact on marine life.  Through out the Hazardous Material sections there is an assumption that the toxic materials expended in exploding ordnances will have "no measurable impact of the environment" is not back up with any proof Instead the Navy takes a particle and averages it dispersal against the whole area when in fact it is not dispersed throughout the whole 122,440 square nautical miles of the NWRRC.	To show the effect throughout the entire area, the approach described in the comment was taken in Section 3.3. To illustrate the potential effect to various species, Sections 3.6 through 3.9 consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used.
Gandhi-36	Volume 1: 3.9 Marine Mammals page 3.9-2 "There are 32 species of marine mammals known to occur in the NWTRC Study Area (Table 3.9-1). Again the "magic math" or "voodoo math" that has 0.00055 of one whale Per squared km is not how reality presents itself. Whales and other marine species travel in "pods" and "schools" and occupy concentrated areas that are always moving. The "J"pod of Southern Resident Orcas do not spread throughout the 122,400 squared nautical miles- nm (420,163) square kilometers 1m of the PACNWOPAREA as shown within the EIS/OEIS draft.	The acoustic modeling used a number of assumptions due to limitations in the science and literature that accurately and precisely define exactly when and where various species occur. However, the acoustic modeling was only one aspect of the analysis of potential impacts to marine mammals. And since the acoustic modeling made no allowance for the Navy's mitigation measures, such as powering down sonar when marine mammals are close to sonar sources, the reality is that Navy ships and aircraft would be more likely to avoid exposing marine mammals to sonar as the pods and schools would be much easier to detect. As the comment noted, many species would not be distributed uniformly throughout the area, but would travel in groups, thereby creating large areas with reduced densities. It is in these areas of reduced densities that Navy sonar activities are likely to occur, whereas the pockets of higher density animals are where the Navy would power down its sonar.  The analysis also looked back on decades of similar activities in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Gandhi-37	3.9 -17: "Federal Agencies (i.e. U.S. Navy) must consult with NMFS to ensure actions will not destroy or adversely modify the Killer Whales (Orca) Habitat.  Critical habitat means a more focused analysis on how the action would alter the habitat and how it will affect ability of habitat to support the populations conservation." Critical habitat designation encompasses parts of Haro Strait,	The Navy is in consultation with NMFS concerning the southern resident killer whale distinct population segment.  The proposed action does not include sonar training within the Strait of Juan de Fuca, Puget Sound, or Haro Strait.

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	waters around the San Juan Islands, the Strait of Juan de Fuca and all of Puget Sound - a total of just over 6,475 km squared excluded are 18 military sites covering 290 km squared of the designated area.	
	How will you warn the marine mammals to not trespass in these 18 "salt water island's of harm"? Who will you warn Endangered Species to not use their usual and historic marine areas now that the Navy wants to use them to train to kill with weapons of war?	
Gandhi-38	Volume 1 Fish 3.7 3.7-16 ESA Salmon runs overlap from mid May through late October. Whales follow and feed on salmon, especially ESA listed Chinook salmon. Thus most of NWTRC would be a kill zone for Endangered Species.  Will training be suspended in the areas (all must pass Whidbey Island) where known salmon runs are?  Mitigation Measures, Page 5-23: "Limiting training activities to fewer than 12 monthswould not meet readiness requirement of Navy's mandate."  [Article on effects of Depleted Uranium within pdf.]	The proposed action does not include sonar training within the Strait of Juan de Fuca, Puget Sound, or Haro Strait.  [Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.]
Garrett-01	An extension of the comment period is needed on grounds the website to submit comments was non-functional during more than half of the comment period. The Navy's principal mechanism for public information and input about the EIS, their website: (www.nwtrangecomplexeis.com/EIS.aspx), was seriously compromised between the Dec. 29, 08 inception of the EIS Public Response Period and Jan. 21.  Attempts to make comments via the website were not allowed due to "abort issue" (Navy's term) from Dec 29 until Jan. 20. The website was not accessible whatsoever between Jan 15 and Jan 21. This represents 51% of the comment time frame and is a breach of process established by the Navy. We contest the Navy's breach of their own EIS comment process and respectfully request an extension of at least one month.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy regrets the lack of website functionality from January 16 to January 21. However, during the period of connection issues, the public always had the opportunity to respond by mail. The Navy has since taken steps to ensure more reliable connectivity for this website.
Garrett-02	Due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's proposed expansion on those species, especially with proposed testing of new systems and inadequate marine mammal monitoring, a "No Action Alternative" is the preferred option.	This comment has been duly noted. The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Garrett-03	Prior to supporting any expansion of training activities the Navy needs to fund independent research on the seasonal presence of marine fish, birds and mammals found within their training ranges rather than rely on outdated surveys.	An independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. This study included seasonal data where available.
Garrett-04	The Navy needs to provide public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Garrett-05	The Navy needs to demonstrate a means to respond to environmental consequences of a maritime incident in all their operating areas including	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other

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	interactions between their ships and commercial vessels.	vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
	We have been involved in observing and researching several species of cetaceans since 1981. We are well acquainted with the difficulty of recognizing brief sightings or faint acoustic signals. In our judgment the mitigation measures detailed in this EIS are not sufficient to reliably identify the presence of cetaceans in most instances.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.
	Recognition of marine mammals at sea either by sight or by sound is highly problematic even for experienced personnel. The Navy should improve mitigation measures to include training of monitoring personnel by experienced whale biologists to improve recognition of marine mammals by	Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
Garrett-06	visual and acoustic monitoring. Recognizing acoustic calls is difficult for most species in calm conditions. Currently proposed monitoring by inexperienced personnel is not likely to be effective even in normal sea-state conditions due to the difficulty of recognizing brief visual or acoustic cues. These exercises would take place in the midst of multiple ships and high-powered and explosive sonars and munitions, often making recognition impossible. Training monitors with visual and audio examples interpreted cetacean observers would improve reliability.	Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be
	Even with the best monitoring by experienced people, the mitigation measures are inadequate. It's usually difficult to reliable detect marine mammals underwater or in rough weather, even more so when compounded by training conditions.	detected and sonar exposures will be avoided.
Garrett-07	The long-term challenge is to dial down the need for these training exercises altogether, which is a problem of international relations and diplomacy. President Obama and Sec. of State Clinton can prevent this danger to marine life by fostering improved international communications and reducing hostilities.	The levels of training described in this EIS/OEIS are those determined by the Navy as necessary to meet the needs of the forces that routinely train in the NWTRC. Changes beyond those described in the alternatives are beyond the scope of this EIS/OEIS.
Goldner-01	The United States Navy requests permissions from the United States Department of Commerce (NOAA), to kill thirty two species of marine mammals over five years in their Pacific Ocean Warfare testing program.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Goldner-02	The expansion of their area of operation will include the State of Washington, the State of Oregon, part of the state of Idaho, and Northern California. The final date for public comment is Aprill3, 2009.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Goldner-03	These designated areas will also include large areas of the Pacific Ocean from California to the State of Washington and areas along the border	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.

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	between the United States and Canada. Once implemented there is no date specified in E.I.S. for this Navy Warfare Testing Program to end although various documents show that this is a five-year Navy Warfare Testing program.	
Goldner-04	The United States Navy has also published an application, as an addendum to their program, in the U.S. Federal Register, dated March 11, 2009. This application from the Navy"requests authorization to take individuals of 32 species of marine mammals during upcoming Navy Warfare testing and training to be conducted in the NWTR areas off the Pacific coasts of Washington, Oregon, and northern California over the course of 5 years."  The Navy Warfare Testing Program will "utilize mid- and high frequency active sonar sources and explosive detonations. These sonar and explosive sources will be utilized during Antisubmarine Warfare (ASW) Tracking Exercises, Mine Avoidance Training, Extended Echo Ranging and Improved Extended Echo Ranging (EER/IEER) events, Missile Exercises, Gunnery Exercises, Bombing Exercises, Sinking Exercises, and Mine Warfare Training"	The activities and alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Goldner-05	The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served upon the "Navy Warfare Chemical Menu" that will contaminate our air, water, and soil.  White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout ofWhite Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Goldner-06	The ocean areas off the coast of Northern California are not a suitable venue for the use of chemical tests, nor is it efficacious to test live ammunition, explosions of aerial or underwater ordnance. Aquatic mammals, fish, invertebrates and birds are resident and migratory animals in these waters that likely will be negatively impacted. Furthermore, the possible resulting damage to downwind human population seems highly suspect and may be the subject of future litigation.  I therefore implore you to not expand the Navy's test areas.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Goldstein-01	The proposed expansion of the Northwest Training Range is unwarranted due to its excessive impacts on the Puget Sound and coastal waters. The	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to

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	EIS does not address the actual impacts associated with a large increase in explosions and ammunition expended. For this reason I would oppose any increase in activities in the training range. In fact, I would seriously question whether the current level of military action (training, explosions, use of ammunition and toxic materials) is warranted.	continue training in the same area as they have since World War II.  The potential effects to the marine environment of the Navy's use of ammunition and underwater detonations was analyzed in Sections 3.3 through 3.10 of the Draft EIS/OEIS.
Goldstein-02	The EIS makes reference to the "taking" of marine mammals but gives no details of how many mammals would be killed or injured. It is not clear that anybody knows the extent of the damage, either from current levels or the proposed expansion. As you know, orcas in the north Puget Sound area and coastal waters have been declining in population lately. It is known that underwater explosions and sonar such as are proposed can damage their echolocation and be dangerous to them.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected.
		Table 3.9-12 in the Draft EIS/OEIS provides annual estimates of the number of various levels of exposure based solely on modeling results. The estimates in this table do not consider the positive effects of the Navy's mitigation measures. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS. Table 3.9-11 provides similar information for proposed underwater detonations.
Goldstein-03	Increases of explosions in Port Townsend Bay are a concern because the bay is a relatively small area that sees a lot of civilian uses. The potential for accidents is thus increased, especially with the increases proposed. The Navy solution of ever increasing restricted areas is not a good solution because much of the civilian traffic consists of unregulated small pleasure boats who are not necessarily up to date on exactly where they are allowed to go. Aside from a blanket assurance that all will be well, there is no analysis of how the increased activities will impact the environment, including sensitive shoreline areas, shellfish, salmon. There has been no serious study of the cumulative impact of the expansion of Naval Magazine Indian Island over the past few years. This proposal represents yet another increase in activity that has significantly increased environmental impacts without a comprehensive study.	Underwater detonations in Port Townsend Bay, and throughout Puget Sound, are proposed to significantly <u>decrease</u> as a result of the proposed action. Current and recent level of underwater detonation training in Puget Sound is 60 detonations per year. The Navy's proposal is to reduce training to 4 underwater detonations per year, with only 1 in Port Townsend Bay (Indian Island underwater EOD range).  A thorough analysis of these activities in included throughout Section 3 of the Draft EIS/OEIS.
Goldstein-04	I am concerned with these issues, not only in Port Townsend Bay, but throughout the Training Range. There are numerous sensitive areas and marine sanctuaries in the affected area, all of which would be affected. The Navy is proposing an increase in the use of toxic materials in these sensitive waters without any serious analysis. Uranium munitions pose an unstudied toxic threat to marine life both due to the toxic chemical properties of uranium and the low level but extremely persistent radioactivity. When small particles are absorbed into living organisms the point source radioactivity within the organism have effects that have not been fully studied but which appear to be quite damaging. Tungsten or DIME weapons also contain toxic materials with potentially damaging effects on the environment that are not addressed in the EIS.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Limited scientific studies have been completed on potential environmental impacts of tungsten and tungsten alloys. To date, the studies indicate that

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		the greatest tungsten threat concerns a specific alloy, and only when embedded in animal tissue. Because the tungsten rounds are used only at sea, and only during certain gunnery training exercises, the fate of tungsten at sea is germane. Section 3.3.1.1 of this Final EIS/OEIS analyzes tungsten in sea water.
Goldstein-05	The Navy, and the US military in general, have not been good environmental stewards. They have generated many superfund sites over the years, including some within this area. At a time when the environment is increasingly at peril, the Navy must join in with all of us in making sure that its activities are safe and environmentally responsible. The plan for this area should be rethought and thoroughly studied to find ways to avoid further environmental degradation.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Greenwood-01	We DO have a choice. We have a voice as taxpayers and free Americans. We are NOT at WAR as far as I know, with the Pacific Ocean, nor the magnificent marine life which attempts and struggles to survive the onslaught of human beings.  For decades now, our environment has been under severe and brutal attack by human activities. Our Mother Ocean has been raped, pillaged, and polluted beyond any of our imaginations, and it is beyond time to STOP this madness.	This comment has been duly noted.
Greenwood-02	As an educator, environmentalist, diver, surfer and advocate for a healthy ocean for over 45 years, I find it utterly appalling that the Navy would request to increase their destructive practices and rape of our Mother Ocean, in some instances by over 400%. While they knowingly and intentionally contaminate our fragile ocean waters and food supply with chemicals such as uranium	The issue of how tax resources are allocated to the Department of Defense goes beyond the scope of this EIS/OEIS. Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.

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	and phosphorus, their additional request to "take" marine mammals and sealife that get in their way, is ultimately grotesque.  While our planet is in jeopardy, we are also in incredibly harsh financial times, with severe deficits, a collapsing economy, and budget cuts at every turn. Yet while the people are all making huge sacrifices, the military with its seemingly endless taxpayer and corporate funds, calls for an expansion of their already huge weapons arsenal, testing areas, and chemical dumping grounds. Not only over and in our unique and irreplaceable oceans, but also inland where all who dwell below are condemned, without consent, to their weapons of	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	mass destruction activities. These practices need to be shut down, not increased!  The Navy is offering "Alternative 1", and "Alternative 2", both which drastically increase their warfare practices. They also offer a "No Action Alternative" where they would "continue at current levels." We propose a different "No Action Alternative" – NO MORE NAVY ACTION. These detrimental and devastating warfare practices that are destroying our Coast and all the Life contained therein must CEASE. We do NOT want our tax dollars spent on killing the ocean that we love and need for survival.	
	We witness the fishing industry being destroyed and Americans forced to "cut back" on expenses. We watch millions of Americans lose their jobs, their retirements, and their homes. I witness firsthand as Education budgets are slashed and public schools programs are butchered and eliminated. YET, the military budget grows as an incurable cancer upon the skies, the land, and the seas. This is the wrong tactic, going the wrong direction.	
Greenwood-03	The innocent marine creatures of our oceans do not have a choice in preventing this mindless, wasteful, and fatal attack on their life sustaining environment. We, as human beings have the moral and intellectual obligation to defend and protect those that have no choice, and no voice.  We choose that this madness of violence and war upon our planet cease. For the future of the Earth, our oceans, and our children, we request that the Navy review and if not totally eliminate, drastically reduce all its <b>current</b> operations and rethink what the priorities are to heal the health of our Earth and Ocean, for the survival of all living beings.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Haines-01	My family and I live very nearly under the approach path to east of NASWI runway 7 – 25 on Whidbey Island and have done so for about five years. The noise level associated with certain high performance jet airplanes is excessive and definitely disturbs our peace.  The Navy refers to both people and selected places as "sensitive receptors." "Sensitive receptors are those noise-sensitive areas, including developed and undeveloped areas for land uses such as residences, businesses, schools, churches, libraries, hospitals, and parks. Military personnel are not considered to be sensitive receptors of airborne noise for purposes of environmental impact analysis (page 3.5-13 "Acoustic Environment").  We civilians are sensitive receptors even though the many active military	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
	personnel in this area are not defined as such! Indeed, when one or two EA-	

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	6B jets are flying overhead to takeoff and land and we are outside our home,	
	normal speech is impossible for about 30 - 60 seconds each time. All	
	conversation comes to a complete stop. Those with hearing impairments	
	must cover their ears for fear of possible neural damage. And even when I	
	am indoors, after-dark, these same jet aircraft keep me awake, sometimes	
	well after midnight.	
	The spacing between aircraft during intense training and operational periods	
	is approximately one flyby every forty-five seconds (sometimes longer). As	
	far as some of my neighbors and I are concerned this jet noise constitutes a	
	disturbance of the peace that would not be tolerated in the civilian community.	
	•	
	The above cited Environmental Impact Study (EIS) is a long and complex	
	report containing many facts. One of them pertains primarily to all residents	
	living within the higher noise contours established by the EA-6B and EA-18G jet aircraft that take off and land at the air station.	
	The official noise contour for these runways is given in Figure 3.5-3 of the	
	Environmental Impact Statement cited above and dated December 2008.	
	This diagram shows dB levels as high as 75 or more (depending on various factors). As is well known, the high noise level of the Grumman EA-6B	
	aircraft is worst with other high performance jet aircraft being somewhat less	
	noisy. I can readily tolerate the P-3 as well as the B737 noise levels.	
	Sometimes the EA-6B jet flying on auto-throttle will produce significantly	
	louder noises than the published 75 dB.	
	Fact. A substantial increase in planned takeoffs and landings is being	
	proposed. Reference to Table 2-9 "Current and Proposed Annual Level of	
	Activities" on pp. 35 - 37 of this EIS provide the following numbers. Only	
	numbers of sorties made by the very noisy EA-6B, EA-18G, FA-I8, and F-I6	
	jet aircraft are cited here and are combined into one number per type of	
	range activity. Other aircraft types are of little concern.	
	(TABLE ATTACHED )	
	If one sortie consists of one takeoff and one full-stop landing per aircraft the	
	above numbers would not be particularly bad. However, during carrier	
	qualification training especially, particularly after dark, each aircraft makes	
	more than one approach, sometimes up to six or more. On several nights I	
	recorded over seventy five almost consecutive EA-6B flybys that continued	
	as late as midnight. I have noticed that on some days and nights there are a	
	significantly larger number of fly-overs than the above daily average would	
	account for.	
	If even 25 percent of the above proposed total increased (929) sorties	
	involves six (ea.) approaches and takeoffs there will be an additional 1,393	
	flybys or another 4.3 per day on the average!	
	Isn't there any way that the total number of takeoffs and landings at NASWI	
	can be reduced, as long as these very noisy jets continue to be used?	
	It is assumed that all of the proposed jet sorties in this EIS will originate at	
	NASWI. However, the number of sorties given in the above table that will	
	potentially fly over any given area on north Whidbey Island will be determined	

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	by wind direction and velocity (i.e., runway assignment). In calm wind conditions why can't ATC direct these aircraft to runway 14 - 32 on a fifty-fifty percent basis so that this excessive noise can be redistributed a little?	
	I look forward to your response to the above questions and, of course, corrections to my calculations if they are needed.	
Hale-01	**copy of Ford and Keller petition	No response required.
Haley-01	It is my opinion, the U.S. Gov and it's military should stop all training and testing in the "NWTRC" that has a negative impact on the marine wildlife and environment of this area. The "sonar" used in this area and how it affects whales and other marine mammals is a crime against God and nature. It is a cruel way for such majestic and endangered life to be killed. Thank you.	This comment has been duly noted.
	I am sorry to read that the United States is thinking of expanding training activities into northern Admiralty Inlet and eastern Straight of Juan de Fuca as well as off the coast. I hope this idea will be dropped and the No Action Alternative will be chosen.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The proposed action does not include sonar training within the Strait of
Hall-01	As a avid boater I am aware of the extensive population of marine mammals that use these waters, both in the summer and winter. I am well acquainted with these waters. Homeland Security should not be used as a reason to further threaten our marine mammals. As you know the orcas are already struggling to survive in Puget Sound. They regularly use these waters, as do gray whales, humpbacks, etc. The plan does not adequately cover detection of these mammals during all kinds of weather and conditions. A fin may be seen too late if at all.  Many of us believe rather than to open up killing more whales, we should face our security issues by being a less aggressive, warring country. It seems like that is what President Obama is trying to do. This is the solution to Homeland Security.	Juan de Fuca, Puget Sound, or Haro Strait.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hanks-01	We are very concerned that the prevailing winds will carry unknown toxic material onto our crop land and create many medical problems for our future generations. We all know the results of the Hanford tests and being downwinders get very nervous of any testing the Navy plans to do on this Training range complex.  Please consider moving these tests away from our coast lines.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Harmon-01	I am writing to request the Navy discontinue all sonar tests, not expand the California testing off coast, and to reduce ocean testing altogether.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Hartman-01	Please reduce military training in all pacific ocean waters.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Hedges-01	I live in Fort Bragg on the California north coast. I oppose the navy extending	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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	its training area along our coast. I urge you to prevent all government or private business interests from taking claim to any aspect of the ocean environment along the Northwest Pacific Coast.	proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The Navy is making no claim to any aspect of the ocean environment along the Northwest Pacific Coast.
		The Navy does not claim any right to the ocean environment within the NWTRC, nor is the Navy performing a 'taking' of land within the NWTRC. Restriction of access within certain areas of the NWTRC does not amount to a federal 'taking' of property.
Hedges-02	The Fort Bragg/Mendocino area is a favorite tourist destination. People who visit our area come for the beautiful ocean views, the walks along the seaside bluffs, the fresh air and the quiet. We fear that the sight of naval vessels on the ocean, the sight and sound of overhead aircraft would destroy the appeal our economy depends on.	Fort Bragg/Mendocino is outside of the NWTRC area.
Hedges-03	The nearly pristine ocean waters off the Northwest Coast of California, Oregon and Washington Northwest Pacific waters are perhaps one of the more environmentally intact ocean ecosystems that we have left in the World. No one should be granted the right to pollute ocean waters and inevitably harm creatures that dwell in coastal and pelagic waters. Organizations sometimes think they have a mandate, their over-riding rationale convince them that their actions are valid. Please don't let the health of the ocean be a tradeoff for the creation of new jobs or the testing of new weapons.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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I am sure that you are aware that the giant kelp forests of the Northwest Pacific are home to myriad wonderful sea creatures. The grey whale makes its yearly travels between feeding and breeding grounds through the coastal waters of the Northwest Pacific. Besides pollution by chemical contaminants in the water and in whales' food sources from increased naval presence, the impacts of sonar testing are known to harm whale species. If for no other reason, don't add further negative pressure to the world's threatened fish populations by allowing the U.S. Navy to carry out this dreadful plan.	The analysis included in the Draft EIS/OEIS included the best available science for determining effects on marine life. As an example, the acoustic modeling used to derive sonar exposure estimates was developed in coordination with the National Marine Fisheries Service (NMFS),a cooperating agency on this EIS/OEIS. NMFS is responsible for the protection of marine specie, and in consultation with the Navy, will consider all potential effects to marine mammals and threatened and endangered species from the Navy's proposed action.
	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
We understand that the Navy proposes to comply with all the federal rules and regulations. But can they guarantee that they will have no impact whatsoever on marine life, noise levels, and visual effects?	The Navy can not make any guarantee that its proposed action will have no effect on the marine and human environment. In fact, these potential effects were described in Chapter 3 (resource sections), Chapter 4 (Cumulative Impacts), and Chapter 5 (Mitigation Measures) of the Draft EIS/OEIS.
Those of us who live here love the ocean and the ocean life; we love the unspoiled landscapes, the quiet, and the exquisite views. We love to see the whales and the shore birds, to examine the tide pools, and to watch the sunset from the ocean bluffs.  We worry that the training will negatively affect our own lives as well as the economy, the local marine life, and the calm and peacefulness of our coastline.  Please do not conduct Naval training off of our coast.	Please see Chapter 3 of the EIS/OEIS for the description and analysis and potential effects. Specifically, those effects to the economy are found in Section 3.14 and have shown through analysis that there are no significant impacts associated with the Proposed Action. Similarly, marine life analysis in Sections 3.6 through 3.10 have analyzed and shown that there are no significant impacts associated with the Proposed Action.
With all due respect I submit my protest. It is incredible how the passage of time changes formerly responsible government agencies like the U. S. Navy into experimenters who appear to care little about polluting our oceans. When I was in my twenties the Navy protected our nation from harm and was highly respected. How can this be the same agency that plans to interfere with fisherman trying to make a living, poison part of our food chain, kill off marine life, and leave bombs, missiles, and God-knows what chemically leaking debris in our beautiful Pacific Ocean off the Oregon and Washington coasts. Third graders and middle-school students that I taught were urged to do what they could to protect our environment. They cleaned up beaches in the Puget Sound and ocean areas in the State of Washington and were taught not to disturb any marine life on our field trips. Along comes the Navy, with its planned training exercises and contradicts all efforts by teachers to urge	This comment has been duly noted.
	I am sure that you are aware that the giant kelp forests of the Northwest Pacific are home to myriad wonderful sea creatures. The grey whale makes its yearly travels between feeding and breeding grounds through the coastal waters of the Northwest Pacific. Besides pollution by chemical contaminants in the water and in whales' food sources from increased naval presence, the impacts of sonar testing are known to harm whale species. If for no other reason, don't add further negative pressure to the world's threatened fish populations by allowing the U.S. Navy to carry out this dreadful plan.  We understand that the Navy proposes to comply with all the federal rules and regulations. But can they guarantee that they will have no impact whatsoever on marine life, noise levels, and visual effects?  Those of us who live here love the ocean and the ocean life; we love the unspoiled landscapes, the quiet, and the exquisite views. We love to see the whales and the shore birds, to examine the tide pools, and to watch the sunset from the ocean bluffs.  We worry that the training will negatively affect our own lives as well as the economy, the local marine life, and the calm and peacefulness of our coastline.  Please do not conduct Naval training off of our coast.  With all due respect I submit my protest. It is incredible how the passage of time changes formerly responsible government agencies like the U. S. Navy into experimenters who appear to care little about polluting our oceans. When I was in my twenties the Navy protected our nation from harm and was highly respected. How can this be the same agency that plans to interfere with fisherman trying to make a living, poison part of our food chain, kill off marine life, and leave bombs, missiles, and God-knows what chemically leaking debris in our beautiful Pacific Ocean off the Oregon and Washington coasts. Third graders and middle-school students that I taught were urged to do what they could to protect our environment. They cleaned up beaches in the Puget Sound and ocean

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	I urge the Navy to go back to the drawing board and come up with a much safer project that does not endanger our food chain and marine life with needless pollution that will take years to dissipate in the ocean. Just how can you possibly predict what will happen to ocean life in the future after depositing all the debris, you plan to leave there? We could have cancer-infected shell fish, or mutations and distortions of diseased fish species. Many of us fear also for the needless pain and damage that could be caused to the magnificent whale families.  Don't forget the atomic bomb tests in the Nevada desert a few years ago. The Air Force said "Not to worry, our scientists are perfectly safe". Most of them died a few years later of brain cancer, including my fiancé.	
Heller-01	I would like to say the Navy is terrifica brilliant, highly trained group of extraordinary human beings. You serve to keep our country safe.  However, if there is any way to minimize the flights over the San Juan Islands please do so. We live on Lopez. We are farmers, animal raisers, nature lovers, and artists. We would appreciate that you respect our desire for quiet and minimal jet flights over our region.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Hill-01	I beg you to "STOP"- It is impossible for me to understand how in this day and age with all of the research and what has been learned from the past-That MY tax paying dollars are being spent for something that will harm the very life force of the Ocean!	This comment has been duly noted.
Hills-01	I am opposed to any expansion of Navy activities on the OR coast.  We, the people do not want sonar testing and other activities that will endanger marine mammals. I am requesting the Navy stop all sonar tests.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Hogg/Strum -1	This DEIS/OEIS is fatally flawed & inadequate on an unknown number of grounds. I say unknown because the two issues on which I did spend time reviewing the relevant sections, revealed a breathtaking (or heart breaking, depending on your point of view) lack of peer-reviewed published scientific research upon which the Navy bases its conclusions. In one of those subject matters, a simple google search reveals a plethora of research that provides ample evidence of a finding that not only does not support the Navy's conclusion of "no significant impact" but directly contradicts the Navy's assertion.	This EIS/OEIS fully meets the requirements of NEPA.  The analysis included in the Draft EIS/OEIS includes the best available science available for determining effects on marine and human life.  Pertinent references were used throughout the document. The Draft EIS/OEIS references over 1,000 independent scientific studies and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was considered in the analysis.
Hogg/Strum-2	The Navy has not complied with the requirements of NEPA. In this DEIS, the Navy has signally failed to, "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment", 42 USC 4332 (1)(A).  Instead, the Navy has refused to consider recognized & very accessible scientific data regarding the potential effects on the ecology of the several	This EIS/OEIS fully meets the requirements of NEPA.  All of the issues mentioned in the comment were analyzed in their appropriate sections within Chapter 3 of the Draft EIS/OEIS.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

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	marine environments (bay, estuarine, nearshore, deep water/ocean) of its use & effective dumping of ordnance containing chromium, tungsten, lead, and mercury. In addition, the Navy fails to indicate the short term and long term effects of its current level of activity, but also fails to effectively & analytically evaluate the potential short and long term effects of either its "Proposed Action" or either of the proposed alternative actions. After reading the Executive Summary, reviewers are left wondering just what the DEIS is evaluating: the environmental & humans effects of a mysterious "Proposed Action" or one of the three Alternative Actions that, in the Executive Summary, are described primarily in various tables inserted into the Summary. What is this "Proposed Action"? The Executive Summary mentions it frequently, but supposedly, the DEIS/OEIS purports to analyze the environmental impacts of three "alternative" actions.	
Hogg/Strum-3	Surely the Navy has the time and personnel to review—effectively—the document produced by its contractors to determine if the document is consistent throughout. However, the DEIS does not even list: (1) the contracting corporations responsible for the majority of the preparation of this DEIS; (2) the <u>qualifications</u> of those employees of the contractors who did the work and whatever scientific analysis, research of the existing relevant research literature and analysis that <u>should</u> (under NEPA) have been performed in producing this Draft EIS., let alone the qualifications of the Navy personnel who ostensibly carefully reviewed this document.  Why should I—or anyone else—find credible a document that is required to: "a detailed statement by the responsible official on- (I) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented when only 2 irrelevant, non-peer reviewed articles are cited to support the document's conclusions, and the qualification of those producing the DEIS are not provided.	Chapter 7 of the Draft EIS/OEIS provided a list of preparers of the document. This list meets the NEPA requirements of a list of preparers as spelled out in 40 CFR §1502.17.  With over 1,000 independent scientific studies and research papers cited in the Draft EIS/OEIS, the Navy fails to understand the comment referring to only "2 irrelevant, non-peer reviewed articles."
Hogg/Strum-4	Based the my review of the DEIS/OEIS neither those unnamed contractors nor the Navy personnel bothered to actually read the Executive Summary of the DEIS. Unless neither of those sets of people could be expected to notice the glaring confusion of terms that were apparent on first impression to me and several others.  For example, the DEIS/OEIS by its own terms, is intended to consider the variety of environmental impacts or effects that the three alternative actions produce in the NW Range Complex not one Proposed Action. Yet the term "Proposed Action" frequently occurs throughout the Executive Summary, yet is never defined or properly identified. Thus, the Executive Summary is a confusing document that does not permit a member of the public to know for sure just what the DEIS is intended to accomplish, let alone to determine if the Navy has actually met NEPA's requirements through this DEIS. It is that badly written.	The Proposed Action refers to Alternative 2, which is the Preferred Alternative.
Hogg/Strum-5	Finally, the DEIS/OEIS fails to effectively (or even adequately) analyse the environmental effects of a variety of metals that, in several manmade forms, are toxic to humans & marine organisms. That is it possible to do so is demonstrated by simple online searches, which reveal, for example, that EPA	This EIS/OEIS fully meets the requirements of NEPA.  The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft

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ID	Issue Text  has issued a fact sheet on the toxicity of manmade forms of chromium (compounds). Other information indicates that uptake by marine organisms occurs & is believed to be hazards (Australian gov't fact sheet on chromium, which cites US research in support of its conclusions). The DEIS/OEIS in no place & in no way even considers this data. Nope, no significant impact is the easy finding for the use, disuse & discard in the ocean of all ordnance, shells, underwater explosives, their deterioration & decomposition, etc. There are NO research articles cited to support the conclusions of the DEIS. Yet it seems that retrieval & disposal of used or faulty ordnance & its byproducts are in fact, a real issue. Why else would the Second International Dialogue on Underwater Munitions been held in February 2009? Why would there be a presentation titled: "Risk Assessment of Chemical Agents in Marine Environments—Parameters for Evaluation of Fate & Transport and Environmental Impacts? Why is there no discussion or inclusion of the data, research results & findings of the First International Dialogue included in this DEIS? Given the Navy's likely current activities & certainly it's proposed enhanced activities, how could such information possibly NOT be relevant in the consideration of the environmental impacts of the Navy's training activities?  For that reason too, this DEIS/OEIS fails to comply with NEPA & therefore should be withdrawn and no enhanced activities should be permitted. It is impossible to determine, from this DEIS/OEIS, what the Navy's activities currently are in the nearshore/offshore, seafloor & airspace over Oregon, what their environmental impacts are and could reasonably be expected to be in the long term. What is long term (as in, a long term effect) is not defined anywhere in this DEIS, nor, for that matter, is short term, although NEPA requires both to be considered. This DEIS/OEIS nowhere gives even a hint, let alone lists, what the Navy's "enhanced" levels of activity in or near Oregon water	Response Text  EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.  Again, there are hundreds of research articles to support the conclusions contained within the Draft EIS/OEIS.
	through the DEIS, simply says, "Trust us. We're not going to tell you anything useful, We're not going to say what we're going to do, we're not going to say where we'll do it, how often we'll do it, or what we're going to use, let alone give you any useful scientific studies for evaluating any possible "enhanced" activities, but trust us, it's ok, there are no significant impacts."	
Hogg/Strum-6	I say, no, this DEIS's findings of "no significant impact" were reached by failing to comply with NEPA. They are not supported by valid scientific research as presented in peer-reviewed articles.  Oregon's beaches, bays, estuaries, wetlands, harbors, nearshore waters, seafloor, fishing and crabbing grounds and airspace the Navy is talking about. This is an extremely important discussion and determination. The result will significantly effect the daily lives of fishermen and coastal residents, how economically viable the fishing, tourist and resort industries will continue to be, how suitable an environment for ocean and estuarine research the Oregon coast will be. Therefore, "trust us," is most definitely NOT good enough. Moreover, such a statement, as embodied in this	This EIS/OEIS fully meets the requirements of NEPA.  The analysis of potential impacts to the human environment with implementation of the Propsed Action is included in Chapter 3 of the Draft EIS/OEIS. The areas off the Oregon coast that are part of the Proposed Action have been analyzed for potential effects and discussed within the appropriate sections of the EIS/OEIS. Please see Chapter 3, Chapter 4, and Chapter 5 for all analysis of the resource areas

Enclosed are comments on the NWTRC FIS from Susan Hogg and Carol	The Navy regrets the lack of website functionality from January 16 to
Enclosed are comments on the NWTRC FIS from Susan Hogg and Carol	
Van Strum. Due to the failures and crashes endemic to the Navy website and the unreliability of its email function, we are forced to submit our comments by hard copy via FedEx at considerable expense. This is but another unidentified impact and expense of the Navy's EIS.  This letter presents my preliminary comments on the draft U.S. Navy Northwest Training Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement, volumes 1 & 2, hereinafter referred to as the EIS.	January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not imited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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Hogg/Strum-08	I reviewed most closely the EIS executive summary. The summary is marked by its inability to decide whether it is a Notice of Intent or an EIS. Most of the text discusses a "Proposed Action," which leaves the reader wondering just what this proposed action is, since the EIS discusses not one but three alternative actions. This confusion renders the executive summary useless for determining what the Navy intends to do, and how it would affect the environment.	The Executive Summary of the Draft EIS/OEIS follows CEQ guidance in that it "adequately and accurately summarizes the statement." And, the Executive Summary "shall stress the major conclusions, areas of controversy (including issues raised by agencies and the public), and the issues to be resolved (including the choice among alternatives)." (40 CFR § 1502.12). This Executive Summary accomplished just that. It summarized the alternatives, and identified Alternative 2 as the "choice among alternatives" (the preferred alternative).
Hogg/Strum-09	Both the executive summary and the rest of the document fail to identify past, current, and future activities in both inland and offshore waters of Oregon and northern California, which comprise most of the area involved in the EIS. This signal omission renders this document effectively useless for any person interested in determining just what the Navy proposes to do off the shores of Oregon, to say nothing of what it has already wrought. For example, the EIS acknowledges that past and present activities off the Oregon coast have involved the use of rounds comprised of depleted uranium. Based on the data supplied in the EIS, it appears that the Navy has annually dumped some 4,040 pounds of depleted uranium in offshore waters; however, this is a minimum estimate, because the navy provides the amount of depleted uranium per round only in the very smallest caliber shells. Thus it is reasonable to assume that the actual amount is far greater, particularly as a far greater quantity of larger caliber shells are used (Table 3.3-4). The EIS fails to specify where or for how many years these depleted uranium rounds have been used in coastal waters, rendering the document useless in evaluating any significant impacts of their use. Furthermore, no prior environmental assessment or EIS has ever been prepared to evaluate the cumulative impacts of the Navy's past and current use of depleted uranium rounds in coastal waters, despite the well-known toxicity and persistence of this material.	The past, current and future activities within the entire Northwest Training Range Complex were described in the Draft EIS/OEIS in Chapter 2 – Description of Proposed Action and Alternatives, and Chapter 4 – Cumulative Impacts.  In Chapter 2 of the Draft EIS/OEIS, the Navy has described, in as much detail as possible, where training would take place. Due to the dynamic environment in which the Navy trains in the NWTRC, the Navy cannot predict precisely where, within the range complex, that training will take place.
Hogg/Strum-10	The EIS repeatedly claims "no significant impact" from dumping of spent and unspent ordnance, chemicals, heavy metals, and other war games detritus without any data to support their claims. Even a superficial or cursory investigation by the unidentified Navy preparers of this travesty of a NEPA-required document would have revealed that even at current levels of Naval activity, local fishermen are spending much time and money retrieving Navy trash that substantially interferes with fishing equipment. (See: oral comments offered at January 30 meeting; see also Newport News-Times, Friday, February 13, page 1.) Thus in this one small area ostensibly covered by the EIS, the Navy's finding of no significant impact violates the most basic requirement of NEPA: to perform elementary fact-finding instead of engaging in wishful thinking.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.  The Navy will base its ultimate decision on this scientific analysis.
Hogg/Strum-11	Finally, the EIS blatantly fails to examine obvious and feasible alternatives such as reducing or eliminating all testing and training actions in the inland and offshore waters of Oregon and northern California. For the above reasons, I advise the U.S. Navy to withdraw its EIS because of the fatal shortcomings of both its content and the Navy's public notice.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.

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	The DEIS/OEIS & the way in which the Navy has chosen to present it, are fatally flawed both substantively and procedurally. Because of these serious & irremediable flaws, the DEIS/OEIS is inadequate. It fails NEPA's and the Navy's own regulatory standards for providing a document in which, "environmental issues are fully considered (emphasis added) and incorporated into the Federal decision making process." 32 CFR 775.3(b). Procedural issues:	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	The notice for both of the open houses/public hearings, in Newport, Oregon, and Tillamook, Oregon, was inadequate.	
	The notices supplied by the Navy or KATZ & Associates for the Newport meeting were in small print and placed in the ad sections of the few local papers who received the "notice" of the first hearing. Whoever was responsible for placing these ads either ignorantly or negligently failed to pay whatever extra fee is required to place an ad in both the print and online version of the local newspaper, thus significantly decreasing the number of readers who had opportunity to perhaps notice that small ad with all the fine print, read it and receive actual notice of the Navy's open house/hearing in Newport.	
	<sup>1</sup> As result of the Navy's response to a FOIA request filed by Carol Van Strum, it is my understanding that the stupidly small print, etc., was mandated by the Navy for reasons as yet unstated, See, Navy's Statement of Work.	
Hogg/Strum-12	The Navy spokesperson alleged that the notice issue had been resolved when providing notice for the meeting in Tillamook (56 papers were allegedly sent notices). However, Charlotte Mills, Lincoln county activist, telephoned 16 of Oregon's coastal newspapers to discover if they had received a Navy press release or ad regarding the Tillamook meeting on February 26th. According to Ms. Mills, six of those sixteen papers, or over 25%, received neither notice nor ad. Of the remaining ten, most were, because of their weekly publishing schedule, able to offer only same day or one day notice. Only one coastal paper, the Newport News-Times, was able to publish the notice six days before the hearing, on February 20th. Unfortunately, Newport is more than 80 miles away from Tillamook, thus few Tillamook residents read the News-Times. The Navy spokesperson stated that notice had been sent to the Oregonian. This commenter reads the online version of the Oregonian (Oregonlive.com) daily, and saw no such notice. It would again appear that neither Navy personnel nor KATZ & Associates, cared enough to ask any of these newspapers if extra payment was required for the ad or notice to be carried in the online as well as the paper version. Such carelessness is inexcusable.	
	Clearly, the Navy personnel responsible, or the Navy's unnamed contractors, were unwilling or unable to do even a minimal amount of basic research on the internet. Had they bothered to do so, they would've discovered they had to get the (very flawed) notices/any press releases, issued much sooner than they were, for the small coastal weeklies to have time to publish the press releases, and fit the fine print ads into their weekly (or perhaps biweekly) paper editions. Again, without additional payment, nothing classified as an	

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	ad would appear in an online version, again greatly decreasing the number of people who could be afforded "notice" through a fine print ad/notice in a local paper.	
	A similar sloppiness characterized the distribution of the single hard/paper copy of the DEIS/OEIS which the Navy felt was adequate for the entire portion of the Oregon population who lack broadband and/or the time to repeatedly visit a website that worked only randomly and sometimes. For the Newport meeting, the single paper copy of the DEIS/OEIS was sent to the Driftwood public library in Lincoln City, Oregon, or not to the nearest public libraries, but to a library over 25 miles away from the meeting site. In addition, there was no documentation mailed with the hard copy to inform the librarian of why the 1000+page document should be placed where members of the public could easily see & review it.	The Navy determined how many EIS copies to distribute and to which public repositories based on locations with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited publication and distribution budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F.
Hogg/Strum-13	Neither the Navy nor KATZ & Associates seemed to have learned anything from their prior mistakes, because for the Tillamook meeting, all that changed was the type of sloppy error. A hard copy was, amazingly, sent to Tillamook, but the cover letter was addressed to the public library in Newport, and the Tillamook librarian, confused by the cover letter, and apparently unaware of the upcoming meeting, sent the hard copy over 80 miles <a href="mailto:away">away</a> from the meeting site, to the Newport library. The librarian's action provides additional evidence that the Navy's notice of the 2nd open house/meeting was just as ineffective & inadequate as that for the first meeting. Had notice been adequate, the librarian would've been aware of the date and location of the second open house/public hearing and thus realized the cover letter was a mistake.	
Hogg/Strum-14	No third open house/public hearing was at a location on the southern coast of Oregon. This omission is an inexplicable failure to offer residents and property owners on the south coast to have the same, if similarly limited, opportunity as north coast residents to discuss the DEIS/OEIS with Navy representatives or simply have the existence of the DEIS/OEIS brought to their attention. The Navy has offered no explanation for why it chose to shut out south coast fishermen, residents, federal employees, state employees, resort owners and vacation and agricultural property owners. The south coast has productive fishing grounds, uniquely and exceptionally beautiful state parks, wonderful beaches, expensive resorts, a substantial tourist industry, a state university research facility, several ports, at least one proposed marine reserve and a tidal energy project area. All of these landscapes, activities and projects could be reasonably expected to be significantly affected by any of the Navy's proposed "alternative actions" yet the Navy unilaterally determined that residents & businesspeople on the southern coast of Oregon weren't entitled to an opportunity to learn more about the DEIS or to present oral comments to representatives of the Navy. Of the 16 coast newspapers Charlotte Mills contacted, 8 were south coast newspapers. Of those newspapers, 4 or 50% reported they had received neither the ad nor the press release. The remaining 50% had received one or the other, often so late that, as weeklies, they could publish the ad only a day before or on the day of the Tillamook meeting. Thus, for a south coast	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.

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	resident to attend the second meeting would have required that resident(s) to be have such a flexible or empty schedule that he/she could decide, on a day's notice, to make a 400+ mile roundtrip. That, apparently, is what the Navy and KATZ & Associates consider to be providing adequate notice and opportunity to comment.	
Hogg/Strum-15	Substantive issues:  No prior EA or EIS for this range or area has ever been issued. However, the DEIS/OEIS indicates that there is a current level of training activity occurring in nearshore/offshore waters, seafloor & airspace near & above Oregon. Yet NEPA was passed in the 1970's, and the Navy's own regulations implementing NEPA require that, at a minimum, an EA must be done to determine whether not Navy activities have a "significant impact" on the natural or human environment. Why has the Navy neglected to perform the level of environmental analysis of the effects of its current activities that NEPA requires and has required since the early 1970's?  At some point after NEPA was passed, the Navy must necessarily have increased or otherwise altered its activities in the area that is now titled the Northwest Training Range Complex that the need for an EA developed. However, even a FOIA request that specifically requested copies of any EA or FONSIs or any other documents that might be thought to have complied with the evaluative requirements of NEPA has met with: no response. No documents. No prior EA, no prior EIS. This lack represents a major violation of the requirements for environmental impact evaluation mandated by NEPA. This apparently comprehensive & absolute violation of NEPA must be remedied before the Navy can conclude it has complied with NEPA's requirements through the publication of this DEIS.  If the current DEIS is not withdrawn pending publication of an EA or EIS evaluating the environmental impacts of the Navy's current level of training activity throughout the entire NW range, then the Navy will have transformed NEPA into a discretionary, rather than mandated, process of environmental impact analysis. Upon reading NEPA, I found no provision that authorizes the Navy to do so and in fact, the Navy's own regulations, require that an EA or EIS be performed even if the data used and the EA/EIS itself will be classified information and therefore unavailable to the public & many other interested pe	This EIS marks the first time the Navy has taken a range complex approach at complying with NEPA on the NWTRC. Previously, NEPA requirements were met by conducting environmental analyses on individual platforms and weapons systems.  The Navy believes this range complex approach will provide a more accurate analysis of the impacts of Navy training.

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	ostensibly analysed in this DEIS. The "no action alternative", impossible.	
	Since such a NEPA/Navy-regulation-required study has never (apparently) been performed, the current DEIS should be withdrawn and not presented, and no "enhanced activities" go forward, until the Navy has, at a minimum, prepared & presented for public comment an EA evaluating the effects of current levels of activity. To do otherwise is to violate NEPA and the Navy's own regulations. It is my understanding that agencies are legally required to follow their own rules.	
Hogle-01	I am opposed to any expansion of Navy activities on the OR coast.  We, the people do not want sonar testing and other activities that will endanger marine mammals. I am requesting the Navy stop all sonar tests.	The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
	I have heard from several constituents that the full opportunity for public comment was compromised due to on-line kick backs and web site system down time.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Homola-01	It would be in the Navy & the public's interest to extend the public comment period.  Thank you for your hard work and good will.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Horning-01	I appreciate the effort in organizing this forum and opportunity for the public to comment on the draft EIS. Sadly, many were only made aware of this opportunity this week. I would like to kindly request that you extend the public comment period by 30 days. I will provide my primary comments on the draft EIS once I have had the opportunity to study the 1000+ page document in detail. Thank you, Markus.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Hoyle-01	We do not wish for the Navy to pursue sonar testing, nor expand this Northwest testing area.	The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Humboldt Bay Harbor Recreation and Conservation District- Fifth Division Comissioner Tony Higgins (Humboldt Bay)-01	Thank you for the opportunity to comment on the Navy's Northwest Training Range Complex (NWTR) Environmental Impact Statement (EIS), which includes the northern coast of California southward to the Mendocino-Humboldt County line and out to sea 250 miles. I am writing as an individual but I am an elected Commissioner of the Humboldt Bay Harbor, Recreation and Conservation District. Our District's jurisdiction includes the Shelter Cover Harbor at the southern extent of your range and we often concern ourselves with regional marine issues. Our offshore area includes four submarine canyons and is one of the ten richest areas of the world's oceans and should be considered for exemption from training activities.	This EIS analyzes the potential impacts of conducting required Navy training throughout the range complex, including the areas described in the comment. The purpose of this analysis is to ensure the Navy makes an informed decision on future training levels. Please see Chapter 3 of the Draft EIS/OEIS for the complete analysis of the potential impacts.

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Humboldt Bay-02	Sonar and Potential Impact to Marine Mammals  I attended the presentation by the Navy and its consultants in Eureka, California, on February 2 and got a great deal of valuable information, but it also left me with several questions. I am pleased that low frequency sonar (LFS), which was documented as acutely stressful to cetaceans is no longer used but I am concerned about use of mid frequency sonar (MFS) systems. According to the DEIS, the sound imaging distance of mid-frequency sonar is 18 kilometers, but what is the extent of distance traveled by the sound waves at a level that would be audible to whales, dolphins and porpoises? Your studies focus on lethal effects to these animals, but what is the nature of the "changes in behavior" that your team of analysts acknowledge?	Beginning on page 3.9-57 of the Draft EIS/OEIS is a complete analysis of marine mammal responses to sound, from physiological (injury) to behavioral (flight response, etc.).
Humboldt Bay -03	As noted above, the area for the northern California coast included in the NWTR has four submarine canyons: Trinity, Eel, Mendocino, and Gorda. We also have extraordinarily consistent upwelling that is not dependent on the Pacific decadal oscillation cycle; consequently, our area has extraordinarily high productivity. What data do you have on the distribution and abundance of cetaceans in this area, particularly those that may fee for extended periods?	An independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
Humboldt Bay -04	I have observed whales feeding off our shores throughout summer, which may increase the potential impacts of the Navy's training here. The DEIS states that officially designated marine sanctuaries or preserves may be off limits to training. I request full consideration of granting status to the California portion of the NWTR. If the State of California sets up a system protected areas under the Marine Life Protection Act, how will that effect use for Navy training?	As described in the Draft EIS/OEIS, the Navy complies with all statutory requirements, such as the National Marine Sanctuaries Act (described on p. 6-3). At present, the only Marine Sanctuary within the NWTRC is the Olympic Coast National Marine Sanctuary.
Humboldt Bay -05	Navy staff and consultants in Eureka assured me that the National Marine Fisheries Service (NMFS) sets mitigation measures to greatly lessen potential impacts to whale species. Does NMFS sometimes use area closures as a component of mitigation? Does NMFS have data on seasonal use of the California portion of the NWTR that assist in risk assessment of your activities and shaping such mitigations?	The National Marine Fisheries Service, as a cooperating agency with the Navy in developing this EIS/OEIS, does establish mitigation measures that the Navy will follow. NMFS mitigation measures for the NWTRC do not include area closures.  The Navy's activities are not seasonal in nature.
Humboldt Bay -06	While the DEIS states repeatedly that training activities are usually carried out off the Washington Coast and generally than 3 miles from shore, I was told by Navy personnel in Eureka that the Navy reserves the right to train inside three miles anywhere within the NWTR. Will the Navy potentially conduct activities inside three miles?	Although unlikely to occur within 3 miles of California's coast, there is a possibility that some Navy activities could occur inside of 3 miles. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, which typically means conducting training far from shore.
Humboldt Bay -07	I was also assured that the Navy will do reconnaissance of an area to make sure that there is no whale activity in the vicinity before training involving MFS is initiated. The high concentration of plankton and windy conditions we typically experience in spring and summer make observation of whales from aircraft problematic. How will you assure that no vulnerable species are near sonar trainings, if turbidity in the ocean is too high for aircraft observations?	There is no assurance that no species will be near sonar training. Searching for and avoiding marine mammal species is one of many protective measures the Navy takes to mitigate any potential harm to marine life.

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Humboldt Bay -08	Data Availability  According to Navy staff and consultants presenting in Eureka, the navy has spent over \$100 million on studies of potential effects of NWTR operation. Are all of the data from these studies available for public or scientific review or are some unavailable?	The Navy has funded \$100 million over the past 5 years to study marine mammals worldwide.
Humboldt Bay -09	In order for the public and scientific community to trust the outcomes the DEIS predicts and to verify its findings, 100% transparency is required. I am particularly interested in data that are used in calibrating the model for potential damage to whales from MFS. Additionally, I would like to know what data you have collected on altered behavior patterns of whales in response to sonar and would like you to demonstrate that it is not a threat to the long term survival of any species. Loss of any species constitutes irretrievable and irreversible damage.	The description of the acoustic modeling used to estimate the behavioral exposures of marine mammals can be found in the Draft EIS/OEIS, starting on page 3.9-67. This description includes an explanation of marine mammal data used.
Humboldt Bay -10	As a fisheries and watershed scientist, I am very aware that terrestrial "and freshwater aquatic ecosystems of northern California and the Pacific Northwest are impaired and often acutely stressed. The ocean ecosystem is much less impacted and we would be wise to desist from any activities that cause loss species or other disruptions that are not absolutely necessary. We in Humboldt county voted heavily for Barack Obama, many in the hope that he would bring back peace to this country and to this world. We see this training exercise as a continuation of "business as usual" of unlimited military spending and do not think that the risk of invasion or attack from enemy submarines is high. Conversely, damage to the ocean ecosystem is likely to result from these activities.  I also disagree with the U.S. Supreme Court* decision that gives authority to the Navy to override the Endangered Species Act due to national security concerns and will relay concerns to the President Barack Obama, who has ultimate sway in this matter as Commander and Chief.  Thank you for your consideration of these comments.  * U.S. Supreme Court, the case of Donald C. Winter, Secretary of the Navy, et al. v. Natural Resources Defense Council, Inc., et al., [NRDC] Case No. 07-1239 [See WIMS 10/9/08]. The case was appealed from the U.S. Court of Appeals, Ninth Circuit.	This comment has been duly noted.
Humboldt County Board of Supervisors (Humboldt Duffy)-01	Thank you for the opportunity to provide input the U.S. Navy's Draft EIS for the Northwest Training Range Complex. I respectfully submit the following for consideration:  1. Request that the Navy provide support and funds research to evaluate how fish and marine mammals respond to these training exercises.	The Navy is a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new,

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		greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Humboldt Duffy -02	There are concerns about the Environmental Impact Statement and the effects of various training types. Of particular concern are behavioral and sub-lethal impacts of mid-range sonar and the proposed underwater training minefield to the fisheries, its impacts to the Pacific Northwest fishing industry, and marine mammals.	Potential impacts from sonar and the underwater training minefield on fisheries were described in Section 3.7 and 3.14 of the Draft EIS/OEIS.
Humboldt Duffy -03	Types of training include aircraft over-flights, vessel movements and deployment of underwater explosives, SONAR, and sonobuoys. The EIS reviews the available literature on how fish react to sound and pressure waves, since these are impacts likely from underwater explosives, SONAR, and sonobuoys. Some important items for additional consideration include:  • Data on how fish respond to sound is limited to relatively few species (I00 species of 29,000 species).  • Most marine fishes are less sensitive to sound than freshwater fishes. However, bay anchovy are relatively sensitive to sound <i>I request that impact considerations inclusion of the northern bay anchovy since they are in the same family.</i>	Data on how fish respond to sound is, in fact, limited to relatively few species. The best available data was used to determine the potential impacts that the Navy's proposed activities would have on fish and other marine species. Experts in fish hearing have worked for careers to gather the available information. Their work was utilized in the Navy's analysis and was cited accordingly. Marine fishes were included in the species with data regarding responses to sound in water. Impact considerations included all species potentially found in the NWTRC. In the absence of data, relative sensitivity to sound was included in the qualitative analyses included in the EIS.
Humboldt Duffy -04	Sensitivity to sound appears to increase with fish size.  • There is much variation in how fish respond to sound, even within a single species.  • Little is known about the chronic impact of sound on fish and nothing is known about the behavioral response of fish to these impacts. A chronic impact is one that does not kill the fish, but results in injury or impaired activity.  • The impact of pressure waves from explosives has potential to injure or kill fish. The EIS presents some data estimating that adult Chinook salmon within 320 meters (about 3footballfields) may be injured or killed by detonating a 20 lb bomb.  These observations suggest that U. S. Naval training exercises have potential to harm fish. Alternative 2, the preferred alternative, training regime identified in the EIS would result in the deployment of 144 bombs, 57 missiles and 9,651 sonobuoys (including 149 explosive sonobuoys) each year. Additionally, Alternative 2 would also deploy sonar devices. If deployed evenly over the large training area, it is unlikely to cause large impacts to fisheries. If, however, training exercises are concentrated in limited areas, the potential for harm would certainly increase.  The EIS suggests that the training exercises may not kill large numbers of fish, however training exercises have potential to impact the behavior of fish, and particularly migratory species such as salmon.  Example: Migrating Chinook salmon off Trinidad, California, rise to within 1 meter of the surface every day at noon. Researchers in Norway have found	As described in the comment, approximately 350 explosive munitions would be used annually under Alternative 2. This equates to approximately one per day across the expanse of the NWTRC OPAREA. The EIS analysis concludes that fish may be affected by Navy's activities Alternative 2, and that individual fish may be affected, injured, or killed, but there will be no population-level effects.

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	that Atlantic salmon in the North Sea exhibit the same behavior. No one yet knows why salmon surface every day at mid-day, but it is likely associated with navigation during migration.  Activities that interfere with this kind of behavior could affect Chinook salmon, and perhaps other migrating fish. The EIS emphasizes the lack of information on fish response to sound/pressure waves and calls for research on this topic.	
Humboldt Duffy -05	2. NOAA National Marine Sanctuary program is conducting initial surveillance and data gathering activities in the Klamath region for the evaluation and potential establishment of a Marine Sanctuary.  Due to time constraints, and the filet that the EIS consists of two documents totaling about 1,000 pages it was difficult to determine the location of training activities described in the EIS, and as a consequence provide meaningful comment to the EIS. Although the Pacific Northwest "Operating Area" extends from the HumboldtlMendocino County boundary to the U.S./Canada boundary, no mention of where specific training might occur within that large area is provided.  Combined with the NOAANMS preliminary planning, surveillance and data gathering activities in the Klamath region, I am unable to provide more specific impact/mitigation comments to the Navy other than to bring this effort to your attention.  In closing, thank you for the previous extension for to allow for additional public comment.	The Northwest Training Range Complex is comprised of two areas; the Inshore Area and the Offshore Area. The Inshore Area is entirely within the state of Washington. The Offshore Area includes only the Pacific Ocean off the coast of Washington, Oregon, and Northern California. There are no land areas or overland airspace in Oregon or Northern California.  The most thorough description of the range complex can be found in Section 2.1 of the EIS/OEIS.
Humboldt County Board of Supervisors (Humboldt Lovelace/ Clendenen) -01	We are writing to you regarding the Navy's proposal to expand both the area and the scope of activities within the Northwest Training Range. Complex. As Humboldt County Supervisors, we have concerns both with the apparent ineffectiveness of public noticing efforts, and with the nature of the expansion itself.  We understand that the EIS/OEIS was originally published on December 30th\ 2008 with public comment scheduled to close on March 11. We further understand that the comment period has since been extended to April 11th, in response to requests from the Oregon Congressional delegation, the Mendocino County Board of Supervisors and other entities.  Despite this extension, the issue itself was unknown to us until it was brought to our Board's attention by a concerned citizen on March 24th. Thus, while we appreciate the Navy's good-faith efforts to allow for more public comment, it must be recognized that a public comment period is of absolutely no value if the public is not made aware of the issue at hand and of their opportunities to provide input.  We further understand that the Navy held a public meeting in Eureka on February 2nd that was attended by Supervisor Jimmy Smith and at least one member of the public. However, a scan of the archives of our local newspapers shows no public notice in advance of the meeting, and no reporting of it afterwards. Clearly; the public cannot be expected to attend a meeting of which they have not been made aware.	The Proposed Action does not include an expansion of Navy ranges.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  Notification for the February 2 Eureka public hearing included advertisements in the <i>Times-Standard</i> on the following dates: Tuesday, December 30; Thursday, January 22; Friday, January 30; Saturday, January 31; and Monday, February 2.

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	For a public comment period to have value, it must be meaningful. The public must be made aware of the issue, they must be given access to necessary information so that they can speak knowledgeably on the issue, and they must be given ample opportunities to address their comments and concerns to the agencies and decision-makers who will then weigh that input. In this case, none of those requirements appear to have been met in any meaningful fashion.	
Humboldt Lovelace/Clendenen -02	Given the lack of public awareness of this issue, we have not had opportunity to develop informed comments on the EIS/OEIS. However, we have a number of initial concerns which we would hope to see addressed, given a reasonable and meaningful opportunity for review and comment. Among these are the behavioral and sub-lethal impacts of midrange sonar on marine mammals, the impact of the proposed underwater training minefield on our already-beleaguered fishing industry and the impact of near-shore operations on our scenic resources and quality of life.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The potential economic impacts of the non-explosive underwater training minefield have been described in the Draft EIS/OEIS in Section 3.14.  Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California.
Humboldt Lovelace/Clendenen -03	Additionally, we find it difficult to understand the stated the need for the proposed expansion, as it seems to be at odds with the stated purpose of the project. The website for this project (http://nwtrangecomlex.com/EIS.aspx#atc) describes the project's goals as:  •Maintain current, levels of military readiness, including ships, submarines, and aviation squadrons, and accommodate future increases;  • Adequately support the training need for new ships, aircraft, and weapons systems,'  • Identify and provide for range enhancements,' and  • Maintain the long-term viability of the range complex while protecting human health and the environment.  This language describes a maintenance effort, not an expansion. There is no substantial discussion of any need to expand the area and scope of activities in the range, as proposed by the preferred alternative. If the Navy has been adequately prepared in the past, utilizing the existing range, then clearly that	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The alternatives include a No Action, and two action alternatives. The No Action Alternative proposes a level of activities consistent with current levels. Both of the two action alternatives analyze the potential impacts of increased levels of activities. The Navy does not propose increasing the existing training areas with any of these alternatives.

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	must be seen as demonstrable proof that the existing facilities are adequate for maintaining future readiness.	
Humboldt Lovelace/Clendenen -04	Given this, the defined "Purpose and Need for the Proposed Action" provides a compelling argument for the "No Action" Alternative. As described; "The No Action Alternative is comprised of baseline operations and support of existing range capabilities. Training and unit-level activities would continue at baseline levels. The Northwest Training Range Complex capabilities would not accommodate proposed force structure changes or provide range enhancements."	The No Action Alternative does not meet the purpose and need of the Proposed Action, which is to accommodate proposed force structure changes and to provide range enhancements. Therefore, the preferred alternative is the alternative that fully meets these needs, Alternative 2.
Humboldt Lovelace/Clendenen -05	It appears that there is an inconsistency between the desire to significantly expand both the area and the scope of operations, and the desire to downplay to the public that very expansion. If indeed, the purpose is to expand activities, then words such as 'maintain current levels' can only be seen as an inadequate and inaccurate description.	The Navy is not proposing to expand the existing training area of the NWTRC in any of the alternatives. The requirement to "maintain current levels" is used to describe minimum current training activity, which does not meet future Navy requirements. Therefore the Navy has proposed two action alternatives that, to differing degrees, describe increased levels of training activities necessary to meet the purpose and need of the Proposed Action.
Humboldt Lovelace/Clendenen -06	In closing, we again note our appreciation for the extension of the public comment period, but ask that the Navy recognize that the additional time is of little meaning if the public is only now becoming aware of the proposal. We do not feel that the addition of a few weeks' time is adequate for a project which is only now coming to the public's attention, and ask that the Navy restart the 45-day public comment period and provide both an adequate outreach program to inform the public of the proposal and a detailed schedule of opportunities for public input throughout the entirety of the project area.  Lastly, we hope to bring this issue to the attention of our full Board at our next meeting on April 11, and anticipate further correspondence to follow.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Humboldt County Board of Supervisors (Humboldt Smith)-01	I am writing on behalf of the Humboldt County Board of Supervisors regarding the Navy's proposal to expand both the area and the scope of activities within the Northwest Training Range Complex. We are concerned both with the apparent ineffectiveness of public noticing efforts, and with the nature of the expansion itself.  We understand that the EIS/OEIS was originally published on December 30 <sup>th</sup> , 2008 with public comment scheduled to close on March 11. We further understand that the comment period has since been extended to April 11 <sup>th</sup> , in response to requests from the Oregon Congressional delegation, the Mendocino County Board of Supervisors and other entities.  Nonetheless, the issue has only recently caught the public's attention.  Though a public meeting was held in Eureka on February 2nd, it was poorly attended. A scan of the archives of our local newspapers shows no public notice in advance of the meeting, and no reporting of it afterwards. Clearly, the public cannot be expected to attend a meeting of which they have not been made aware.  To the best of our knowledge, the local media had not reported on this issue	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

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	at all until this past Tuesday, March 31st, the same day that the Navy held a public meeting with the Mendocino Board of Supervisors. Thus, while we appreciate the Navy's good-faith efforts to allow for more public comment, it must be recognized that a public comment period is of no value if the public is not made aware of the issue at hand and of their opportunities to provide input.  For a public comment period to have value, it must be meaningful. The public must be made aware of the issue, they must be given access to necessary information so that they can speak knowledgeably on the issue, and they must be given ample opportunities to address their comments and concerns to the agencies and decision-makers who will then weigh that input. Though the Navy has provided information on the project's website, we believe there has been inadequate public outreach to drive people to that resource, making it of little value.	
Humboldt Smith -02	Beyond these procedural issues, our Board also has concerns with the behavioral and sublethal impacts of mid-range sonar on marine mammals, the impact of the proposed underwater training minefield on our already-beleaguered fishing industry and the impact of near-shore operations on our scenic resources and quality of life.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The potential economic impacts of the non-explosive underwater training minefield have been described in the Draft EIS/OEIS in Section 3.14.  Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California.
Humboldt Smith -03	Additionally, we find it difficult to understand the stated need for the proposed expansion, as it seems to be at odds with the stated purpose of the project. The website for this project (http://nwtrangecomplexeis.comIEIS.aspx#atc) describes the project's goals as:  • Maintain current levels of military readiness, including ships, submarines, and aviation squadrons, and accommodate future increases;  • Adequately support the training need for new ships, aircraft, and weapons systems;  • Identify and provide for range enhancements; and  • Maintain the long-term viability of the range complex while protecting human health and the environment.  This language describes a maintenance effort, not an expansion. There is no substantial discussion of any need to expand the area and scope of activities in the range, as proposed by the preferred alternative. If the Navy has been	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The alternatives include a No Action, and two action alternatives. The No Action Alternative proposes a level of activities consistent with current levels. Both of the two action alternatives analyze the potential impacts of increased levels of activities. The Navy does not propose increasing the existing training areas with any of these alternatives.

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	adequately prepared in the past, utilizing the existing range, then clearly that must be seen as demonstrable proof that the existing facilities are adequate for maintaining future readiness.	
Humboldt Smith -04	Given this, the defined "Purpose and Need for the Proposed Action" provides a compelling argument for the "No Action" Alternative. As described, "The No Action Alternative is comprised of baseline operations and support of existing range capabilities. Training and unit-level activities would continue at baseline levels. The Northwest Training Range Complex capabilities would not accommodate proposed force structure changes or provide range enhancements."  It appears that there is an inconsistency between the desire to significantly expand both the area and the scope of operations, and the desire to downplay to the public that very expansion. If indeed, the purpose is to expand activities, then words such as 'maintain current levels' can only be seen as an inadequate and inaccurate description.	The No Action Alternative does not meet the purpose and need of the Proposed Action, which is to accommodate proposed force structure changes and to provide range enhancements. Therefore, the preferred alternative is the alternative that fully meets these needs, Alternative 2. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Humboldt Smith -05	In closing, we again note our appreciation for the extension of the public comment period, but ask that the Navy recognize that the additional time is of little meaning if the public is only now becoming aware of the proposal. We do not feel that the addition of a few weeks' time is adequate for a project which is only now coming to the public's attention, and ask that the Navy restart the 45-day public comment period and provide both an adequate outreach program to inform the public of the proposal and a detailed schedule of opportunities for public input throughout the entirety of the project area.  Thank you for your attention to our concerns.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Humboldt County Democrats-01	The Humboldt County Democratic Central Committee (HCDCC) takes this opportunity to comment on the Navy's Northwest Training Range Complex (NWTR) Environmental Impact Statement.  At our meeting on February 11,2009, the full HCDCC passed the attached Resolution endorsing the comments of Patrick Higgins dated February 4, 2009, also attached.  We would like this resolution endorsing the comments of Patrick Higgins to be entered into the public record on behalf of the HCDCC and to have these comments responded to in the final version of the Environmental Impact Statement.  (resolution endorsing comments of Patrick Higgins-attached)	See responses to Mr. Higgins' comments.
Hunnicutt-01	You should rule a country as you would cook a small fish. We will see a time when there will only be plankton and jelly fish in the ocean.  Don't blow up the ocean! NO, NO, NO!  Those marine mammals and other sea life are fragile. Don't blow up the ocean!	This comment has been duly noted.
Hurd-01	Thank you for putting Mr. Sharma in touch. I emailed him the above and	The Navy regrets the lack of website functionality from January 16 to

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	apparently he and his cohorts resolved this issue yesterday, for the time being at least.	January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
	I find it astonishing that you indicate that you've received only 40 some responses online to date, 38 days into your 44 day "response period" on this far reaching issue you've been planning. Perhaps others were confused or put off by being "required" to enter an "organization" (one of 4 "required" fields) in order to comment. What about unaffiliated individuals? Your response webpage offer no option to them. I'd really appreciate hearing an explanation for the rationale for this "organization" requirement that appears to be an impediment to the process. Were the 40 some responses you received allowed into the system because they came from members of the "right" organizations?	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	In light of these delays and communication difficulties, it is only reasonable that the eis response period be extended.	
	My response to the NWTRC draft eis follows and I submit it here (please pass it onto the eis people) in the context of not having gotten any feedback other than the "thank you" message after sending via the webpage today that my comments actually got to the Navy. You, for instance, got a reply indicating I'd opened your email to me.	
	Response/comment on the Navy's NWTRC draft eis from John Hurd WA 98236 on 2-6-09: Access to the 1068 page EIS documents was unavailable from the Navy's website: www.nwtrangecomplexeis.com/EIS.aspx from Jan 15 -21 (15% of Public Review Period). Further, it appears the Navy's primary mechanism to receive public comment: was non-functional (due to an "abort" issue online) for some from the Dec. 29, 2008 until Feb 6 (86% of Public Review Period ending Feb 11). Therefore I request an extension of response period.	
Hurd-02	While recognizing the need for readiness through training, the No Action Alternative is all that we can support due to lack of information available to assess the impact on numerous endangered and declining marine species, especially with proposed testing of new systems.	This comment has been duly noted.
Hurd-03	Prior to supporting proposed changes in training activities the Navy needs to fund independent research on the seasonal presence of marine mammals, fish and birds found with their training ranges rather than rely on outdated surveys.	The Navy funded an independent study in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. This study included seasonal data where available.
Hurd-04	The Navy needs to provide the public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Hurd-05	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships and commercial vessels.	There are various mechanisms through which the Navy may be notified of maritime incidents. When appropriate the Navy does provide assistance during maritime incidents however the U.S. Coast Guard, not the Navy is typically not the primary response agency. U.S. Caost Guard Navigation Rules and 33CFR26 - BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS

in paragraph (a) (4) of this section, this part applies to: (1) Every power-driven vessel of 20 meters or over in length while navigating; (2) Every vessel of 100 gross tons and upward carrying one or more passengers for hire while navigating; and (4) Every dredge and floating plant engaged in or near a channel or fairway in operations likely to restrict or affect navigation of other vessels except for a maintenance or intermittently manned floating plant under the control of a directly.  (b) Every vessel, diredge, or floating plant described in paragraph (a) of this section must have a radiotelephone on board capable of operation from its navigational bridge, or in the case of a directly floating in the case of the contained in the pacific Northwest or that utilize the considered.  Hurd-06  Hurd-06  Hurd-06  Hurd-07  Hurd-08  Hurd-08  Hurd-08  Hurd-08  Hurd-08  Hurd-09  H	ID	Issue Text	Response Text
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navigating; (2) Every vessel of 100 gross tons and upward carrying on or more passengers for hire while navigating; (3) Every towing vessel of 26 feet or over in length while navigating; and (4) Every dredge and floating plant engaged in or near a channel or failway in operations likely to restrict or affect navigation of other vessels except for an umanned or intermittently manned floating plant under the control of a dredge. (b) Every vessel, dredge, or floating plant described in paragraph (a) of this section must have a radiotelephone on board capable of operation from its navigational flotinge, or in the case of a dredge, from its main control station, and capable of transmitting and receiving on the frequence or frequencies within the 156-fize Mega-Hertz band using the classes of emissions designated by the Federal Communications Commission for the exchange of navigational information.  (c) The radiotelephone required by paragraph (b) of this section must be carried on board the described vessels, dredges, and floating plants upor the navigable waters of the United States.  (d) The radiotelephone required by paragraph (b) of this section must be carried on board the described vessels, dredges, and floating plants upor the navigable waters of the United States.  (d) The radiotelephone required by paragraph (b) of this section must be carried to a described proper expert of the current operations. The control of a dredge from the control of the exchange of ravigational information.  (c) The radiotelephone required by paragraph (b) of this section must be carried to a described by the following the control of a dredge.  (d) The radiotelephone required by paragraph (b) of this section must be carried to a described proper of the control of a dredge.  (d) The radiotelephone required by paragraph (b) of this section must be carried to a described proper of the control of a dredge.  (e) The radiotelephone required by paragraph (b) of this section must be carried to a described by the control of the control of th			(a) Unless an exemption is granted under §26.09 and except as provided in paragraph (a) (4) of this section, this part applies to:
passengers for hire while navigating; (3) Every towing vessel of 28 feet or over in length while navigating; and (4) Every dredge and floating plant engaged in or near a channel or fairway in operations likely to restrict or affect navigation of other vessels except for an unmanned or intermittently manned floating plant under the control of a dredge or intermittently manned floating plant under the control of a dredge or intermittently manned floating plant under the control of a dredge or intermittently manned floating plant under the control of a dredge or intermittently manned floating plant under the control of a dredge or intermitting and receiving on the frequency or frequencies within the 156-162 Mega-Hertz band using the classes of emissions designated by the Federal Communications Commission for the exchange of navigational information.  (c) The radiotelephone required by paragraph (b) of this section must be carried to board the described vessels, dereges, and floating plants upon the navigable waters of the United States.  (d) The radiotelephone required by paragraph (b) of this section must be carried to a board the described vessels, dereges, and floating plants upon the navigable waters of the United States.  (d) The radiotelephone required by paragraph (b) of this section must be capable of transmitting and receiving on VHF FM channel 22A (157.1 MHz).  The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured.  Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  I see the Navy as the "can do" heroes of America's defense, capable of amazing feats, including mid-air refueling and other seemingly impossible things in the e			
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The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured.  Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  I see the Navy as the "can do" heroes of America's defense, capable of amazing feats, including mid-air refueling and other seemingly impossible things in the execution of their mission. I would hope that taking seriously the protection of our nation's heritage marine environment would be viewed as part of their mission statementand it's execution as flawless as all other endeavors.  Carried on board the described vessels, dredges, and floating plants upor the navigable waters of the United States.  (d) The radiotelephone required by paragraph (b) of this section must be capable of transmitting and receiving on VHF FM channel 22A (157.1 MHz).  Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NVTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant. The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates woul			this section must have a radiotelephone on board capable of operation from its navigational bridge, or in the case of a dredge, from its main control station, and capable of transmitting and receiving on the frequency or frequencies within the 156-162 Mega-Hertz band using the classes of emissions designated by the Federal Communications Commission for
The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured.  Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  I see the Navy as the "can do" heroes of America's defense, capable of amazing feats, including mid-air refueling and other seemingly impossible things in the execution of their mission. I would hope that taking seriously the protection of our nation's heritage marine environment would be viewed as part of their mission statementand it's execution as flawless as all other endeavors.  Capable of transmitting and receiving on VHF FM channel 22A (157.1 MHz).  Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that use those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant. The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface.  The primary exposure pathway from exposure to depleted uranium (DU) rounds. Those particulates would not normally be created when the			carried on board the described vessels, dredges, and floating plants upon
radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured.  Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  I see the Navy as the "can do" heroes of America's defense, capable of amazing feats, including mid-air refueling and other seemingly impossible things in the execution of their mission. I would hope that taking seriously the protection of our nation's heritage marine environment would be viewed as part of their mission statementand it's execution as flawless as all other endeavors.  Hurd-06  Hur			capable of transmitting and receiving on VHF FM channel 22A (157.1
protection of our nation's heritage marine environment would be viewed as part of their mission statementand it's execution as flawless as all other endeavors.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the	Hurd-06	radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured.  Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  I see the Navy as the "can do" heroes of America's defense, capable of amazing feats, including mid-air refueling and other seemingly impossible	be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are
consequences of DU in Aquatic Ecosystems " DU released to the		protection of our nation's heritage marine environment would be viewed as part of their mission statementand it's execution as flawless as all other	from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by

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		environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium."
		The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies." A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the past use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
		(Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.)
Hurd-07	NWTRC PROCESS FATALLY FLAWED  WERE PUBLIC RESPONSES CHERRY PICKED?  The Navy's NWTRC public comment webpage http://www.nwtrangecomplexeis.com/NtrcCommentForm.aspx finally worked for me on Friday 2-6-09 I had a conversation on that Friday with Sean Hughes, Deputy Director of Public Affairs, Commander, Navy Region Northwest, who opined that I was unique in raising a complaint about not having been able to comment online prior to that. It's not true that I'm unique in finding the site nonfunctional. I can imagine that many who had their online comment attempts rebuffed lacked the temperament or intestinal fortitude to follow up with a formal complaint. Nonetheless, in this tech age, the website is the primary communication organ and aught to function for all during all of the comment period established.  The Navy would like to construe this technical issue to be an isolated	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Approximately 1,600 successful website comments were submitted during the period before January 16 and after January 21.
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	incident. It's not. Here's some information to refute the "isolated incident" (better construed as the "blame the victim") idea and to put it in context: 6 emails from others (copied below) who had the same "abort" issues I had including one wherein the Navy acknowledges on Jan 20 there was an "abort issue".	
	Deputy Director Hughes writes on 2-5-09: "So far, over 40 other public comments have been received via this form." A mere 40-some online comments from a possible 300 million Americans 38 days into the comment period on a project this big leads me to believe that the Navy has succeeded in keeping comments to a minimum. If those comments got through before 2-5-09 was it because those folks happened to enter the "right" organization in the "required" organization field? Sorry, but in this era of "crisis in trust" I'm uneasy that some comments got through and others didn't. Smells fishy. There is a window of doubt.	
	The issue here is not just my own or any one individual's comments being heard or accepted online. This issue I raise is that the navy has done less than a competent job making the public response process work for all. Mr. Hughes implied the problem was with my computer.	
	The fact is that the problem was solved without any changes to my computer equipment or connection when the good folks at Parsons (Navy's web contractor) finally fixed the Navy's dysfunctional comment webpage - http://www.nwtrangecomplexeis.com/NtrcCommentForm.aspx after talking with me on the phone on 2-5-09. The problem which untold numbers of individuals had encountered was resolved on that day. That's 38 of 44 comment days (now 51 days with the Navy having granted a mere 7 day extension because of this mess). There is no evidence that the system worked for all from the beginning (12-29-08). There is plenty of evidence that for 38/51 or 75% of the comment period many individuals' attempts to comment were "aborted" (Navy's term).	
	The Navy's process was broken for more than a month and more than a week's extension is required to compensate, as expressed by attorney Zak Smith with NRDC. Please provide a month's extension beyond 2-18-09 or start over. The process is broken.	
Hurd-08	[Emails attached indicating problems with 5 others (not 6 as the letter indicates)]	No response required.
Island County-01	The Board of Island County Commissioners wishes to extend its gratitude for the in-depth draft EIS/OEIS of the Northwest Training Range Complex (NWTRC) you have prepared. This is a complex and highly detailed study. Understanding the full ramifications of the No Action, Alternative: 1 and Alternative 2. proposals requires many hours of scrutiny.  As government agency representatives, we realize the importance of transparency and public participation. We understand that there were glitches with the NWTRC web site that prevented downloading of the document, denied web site access and aborted submissions. This resulted in many	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	denied web site access and aborted submissions. This resulted in many denied days for public comment.	25 52253 27 man postinamed no later than the closing date.

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	It is our shared interest to provide citizens the opportunity to review this complex proposal and to allow ample time for comment. We respectfully request that you extend the public comment period to February 28, 2009. This will send a clear message that the United States Navy is an earnest supporter of the citizens of this country.	
	We thank you for the extension to 11 March for public comment on the EIS/OEIS for the Northwest Training Range Complex NWTRC). Although this was helpful, we are receiving resounding concerns that citizens need more time and more answers.	See response above.
	The Navy's role in protecting our citizens is crucial~ but protection has many facets that must work in concert.	
	It is our job as public officials to find and support that balance of man and nature that will keep our citizens safe, fed and. healthy while affording the highest quality of life possible.	
Island County-02	There have been many questions raised by citizens with regard to the science applied and data used in the EIS/OEIS. Many are concerned that a large section of the training ground overlaps with a critical habitat designation of Southern Killer Whales, which are protected by the Endangered Species Act. A portion of the training ground almost totally encompasses the Olympic National Marine Sanctuary~ a habitat of great importance for marine life including commercial fish and shellfish.	
	Because there are so many citizens concerned with the scientific data used or not used and the potential for severe marine impacts, we earnestly request that you extend the public comment period to May 29, 2009. This will allow for further public notification and will avail the Navy time to provide answers to citizens' concerns.	
	It is my understanding that the U.S. Navy is proposing an increase of training activity on the coast of Washington State.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training activities that would occur in the training areas of the NWTRC, which are mostly
	I am a resident of Lopez Island in the San Juan Islands which will be affected directly by the increased takeoffs and landings from the not too distant	overwater or at high altitudes, for those over land.
Janeway C-01	Whidbey Naval Air base. I am concerned about the anticipated increased number of over flights of San Juan County and the noise levels that will result from the increased traffic. Some of the increased noise is expected to be the result of replacement of the EA6-B Prowlers by the noisier E-18 Growlers. Training on the coast with live ammunition is also a concern.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity, or number of flights proposed is not significantly different from the level of activity over the past several decades.
	Is this increased training necessary at this time? Do we really need to replace the Prowlers with Growlers? I would like to see our financial resources transferred from this war preparedness activity to sustainable long-term jobs and industries which might result in a more peaceful world.	In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
	I would urge you to reconsider the planned Whidbey Naval Air base anti terrorism activity.	
Janeway M-01	It is my understanding that the U.S. Navy is proposing an increase of training activity on the coast of Washington State.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training activities that
	I am a resident of Lopez Island in the San Juan Islands which will be affected	would occur in the training areas of the NWTRC, which are mostly overwater or at high altitudes, for those over land.

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	directly by the increased takeoffs and landings from the not too distant Whidbey Naval Air base. I am concerned about the anticipated increased number of over flights of San Juan County and the noise levels that will result from the increased traffic. Some of the increased noise is expected to be the result of replacement of the EA6-B Prowlers by the noisier E-18 Growlers. Training on the coast with live ammunition is also a concern.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity, or number of flights proposed is not significantly different from the level of activity over the past several decades.
	Is this increased training necessary at this time? Do we really need to replace the Prowlers with Growlers? I would like to see our financial resources transferred from this war preparedness activity to sustainable long-term jobs and industries which might result in a more peaceful world.	In fact, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
	I would urge you to reconsider the planned Whidbey Naval Air base anti terrorism activity.	
Johnson C-01	No Comment left- address only.	
	No Navy takeover of National Guard. No expansion of Naval training. No mine fields. No sonar practice.  This is madness. We need to protect the environment, fishing industry, marine life, develop wave energy.  I am totally against any military activity off the Oregon Coast.	As described in Chapter 2 of the Draft EIS/OEIS, the Navy's proposed action does not include taking over the Air Force practice range off the Oregon coast. Navy use of these areas (designated as W-570 and W-93 on charts) is approximately 15 percent of their total use (85 percent is by Air Force and Oregon Air National Guard). These ratios are expected to remain constant throughout the range of Alternatives.
Johnson J-01		As to the comments concerning the specific activities; the Draft EIS/OEIS thoroughly analyzed the impacts of proposed Navy training activities.  The Navy will base its ultimate decision on this scientific analysis.
		It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Kersting-01	Many of the request I will make are the same as others so I am putting my personal remarks now. I cannot help but wonder what earth you expect to be able to live on when this earth is no longer viable. There are dead spots in many places on our earth. That the earth can sustain the damage being done is no longer debatable by unbiased scientists and is observable by the common person.	This comment has been duly noted.
	I request that none of the Alternatives offered in the Navy's DEIS be accepted. There is already a level of damage to the earth and its species that is to me unacceptable. To increase the level of destruction is not acceptable.	
Kersting-02	I request that the Navy and all military cease the use of depleted uranium. To poison the earth and all life dependent on the earth is not acceptable to me. You are poisoning yourselves.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in

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		Section 3.3.1.1.7.
	Ban at sea dumping,	Table 3.4-2 of the Final EIS/OEIS describes the current Navy policies concerning waste discharge from Navy ships.
Kersting-03		Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships.
Kersting-04	set aside the Olympic Coast National Marine Sanctuary, from all training uses and cease sonar exercises in Puget Sound and Haro Strait.	Chapter 6 of the EIS/OEIS describes the OCMS regulations that pertain to Navy activities in the sanctuary.
Nersung-04		The proposed action does not include sonar training within the Strait of Juan de Fuca, Puget Sound, or Haro Strait.
Kersting-05	Avoid as much as human and technically possible, killing, and harming whales and the creatures of the sea.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Final EIS/OEIS. The Navy has implemented all precautionary measures suggested by NMFS and the Navy does not anticipate injuring or killing marine mammals.
Kersting-06	I also request the Navy's support of an establishment of A Department of Peace so that in time, with Gods help it will no longer necessary to kill and destroy humans, animals and the very earth that sustains us	This comment has been duly noted.
Kiff-01	Please do not harm the oceans' whales and dolphins whose brains bleed and whose communication and directional systems get harmed when you do sonar testing.  Watch PBS's Costeaus program on the Beluga whales. It was on PBS this evening. Please help save these marvelous creatures.  Note: This enclosed column is in Hld-Tribune Apr. 9, 2009. I am the author.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Kiff-02	My mother taught me to love flowers and gardening; a quiet, intense young Sophomore boy taught me to love whales. I was working in the Career Center at Healdsburg High School when the boy, Eddie Burton, came in and said, "Mrs. Kiff, I have an idea for a field trip - whale watching!"  Inwardly, I began to wonder how I could connect any careers with whale watching but the earnestness and excitement of Eddie was too much to ignore.  "That is a great idea, Eddie, let me get information about it:'	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life,

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	Since it was my job to fill any students' interest in the career(s) of their choice by exposing them to books, pamphlets, college catalogs, guest speakers, and, yes, field trips, I needed to know where their interests were. In the beginning of each school year, I would have every student fill out a questionnaire and list their first three career interests. Most of them took it seriously and that information guided me as to what programs and/or speakers to invite to talk to the students.  So, after perusing the career information provided by the student body, I found that about twenty students had an interest in marine biology or oceanography. If I could find an excursion boat I probably could come up with the students to go aboard.	coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.
	Of course, I discovered that there were plenty of whale-watching trips which I never knew existed, let alone participated in. But, all that changed as one sunny day the students, my oldest son, Joel, and I boarded the Merry Jane out of Bodega Bay with a whale watch guide and a package of Meridian. (I had to get permission from every parent to give it to their child thirty minutes before the boat left the dock and no one got seasick because of it.)	In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood
	That day was a life changer. From that trip on, I have always read anything I could about whales and, with my daughter, Sarah, we enrolled in a fantastic marine mammal biology class at SRJC a few years later. It was taught by Dr. Bob Rubin and he is most probably responsible for many, many folks in Sonoma County taking up the cause of the whale and other assorted creatures of the sea.	cleanup projects.
	I know that whales are a long way from a farm garden but the news that the Navy is resuming their sonar testing in waters off Northern California is just another irritating reminder that we humans should not mess up the planet any more than we have. Why can't we keep our damaging practices confined to the land for goodness sake? At least on land we have a chance to sop up the problem before it floats away, like the landfill issue, the mining hazardous waste, the river dams, overland pipe lines.	
	In the vast ocean, it seems such an insignificant act to just toss some nuclear waste in a drum into the depths where our secret will be kept and no one will be wiser. But, the creatures off the Farallon Islands know the difference.	The disposal of nuclear waste is not part of the proposed action.
Kiff-03	The Navy needs to practice their sonar from their submarines. They try really hard not to blast it near any whales or dolphins whose communication, memory, direction are all dependent upon their sonar ability. I liked the quote in the S.F. Chronicle this morning from a lady at a public hearing in Mendocino when she listened to the Navy representative explain that they needed to test their sonar in order to wage war. She answered something to the effect that they had already learned well enough how to wage war. They should practice waging peace now.	
	The Gray whales the day of our first excursion were exceedingly friendly and the tour guide was blown away by one of the females who kept following in the wake of the Merry Jane, even diving under it on one side and emerging on the other. We, of course, being all "freshmen whale watchers" couldn't initially appreciate his excitement. We assumed whales always acted like	

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	this. But, he succeeded in convincing us that he had never encountered such	
	friendliness in a Gray before and that what we were witnessing was truly amazing.	
	Sarah and I went on numerous other excursions with Dr. Rubin's class: to Anyo Nuevo Park to see the elephant seals; to Steinhart Aquarium; and at least three other sea trips out of Monterey Bay and Bodega. Out from Monterey Bay we were all greatly taken by the sea otters, floating on their backs in the kelp, carefully holding an abalone shell. An hour or so later we spied a Blue whale, the one that comes up smiling when it breaks the surface of the sea.	
	I've never been to Hawaii so I cannot marvel at the Humpback Whales that rise completely out of the water, spinning and smacking the water. I've only seen them in pictures but I know that many of you, readers, have watched them in wonder.	
	And speaking of wonder, I wonder if you will join me in contacting the United States Navy Northwest Training Range Complex (NWTRC) and submit an opinion by April 13th? They have a web site, which you should check out: nwtrangecomplexeis.com and an address by snail mail:	
	Naval Facilities Engineering Command Northwest	
	1101 Tautog Circle, Suite 203	
	Silverdale, WA 98315-1101	
	ATTN: Mrs. Kimberly Kler- NWTRC EIS	
	There is a public comment form that you can use, but I'll be darned if I can download any such animal from that Navy web site, so, there are copies at the Tribune office in Healdsburg for your convenience.	
	And, that neat kid, Eddie Burton, who was responsible for opening up the hearts and minds of so many of us regarding those gentle giants of the sea - he grew up to be the talented artist he was in high school, but he never saw any whales that day. His dad told Eddie that he was needed to work on the building of their home and so he couldn't go on the field trip. When Eddie told me this, a day or two before the trip, I thought I'd cry. It was, and still is, one of the saddest moments of my life, just recalling it, and that was twenty years ago!	
	Eddie, if you're out there, call me up some time and tell me you've gone whale watching many, many times. (And, I think I'll just send this entire story to the Navy by clipping it to their form.)	
Kimball-01	I am a resident of Dugualla Bay Heights and I am very concerned about the proposed increase of Navy flights over our area. I understand that flights could be doubled. The increased noise over extended periods of time would make it almost impossible to be outside.  Also, the value of my property would decrease significantly because of these	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
	overflights.	
	There are also problems with the effect the flights will have on the local	

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	environment and over the larger area in which noise and possible discharge from these planes will take place.	
	I request that there be no increase in flights over my area.	
Knopf-01	In view of our local, national and worldwide economic collapse, I believe that wasting resources cannot be justified. This includes blowing up perfectly good bombs as well as destroying any marine life and fisheries.	This comment has been duly noted.
Knopf-02	Releases of toxics in air and water is unacceptable under any circumstances.	This comment has been duly noted.
Knopf-03	Torturing marine life and marine mammals with sonar and explosions is abhorrent. Your tolerance of it lowers the barre of behavior in the society. End these practices, do not expand them.	This comment has been duly noted.
Kolody-01	Thank you – US Navy for all your service! There must be a reason to expand maneuvers in the Northwest- China? North Korea? So I trust President Obama why you need to increase your work. However I am very concerned about effects on Marine Mammals. The materials provided on website & at meeting did not provide enough detail. If NOAA standards are used for protecting our sea lions, this is <a href="inadequate">inadequate</a> as they allow the killing of them! This is unacceptable as they will go the way of the Manatee whose "sport fisherman's" boat propellers killed off many almost to extinction. Sea Lions need salmon to survive! Man can alter his eating habits. Navy needs higher standards to protect and <a href="inadequate">inadequate</a> as they allow the killing of them! This is unacceptable as they will go the way of the Manatee whose "sport fisherman's" boat propellers killed off many almost to extinction. Sea Lions need salmon to survive! Man can alter his eating habits. Navy needs higher standards to protect and <a href="inadequate">inadequate</a> as they allow the killing of them!  This is unacceptable as they will go the way of the Manatee whose "sport fisherman's" boat propellers killed off many almost to extinction.  Sea Lions need salmon to survive! Man can alter his eating habits.  Navy needs higher standards to protect and <a href="inadequate">inadequate</a> as they allow the killing of them!	The potential impacts to marine mammals were thoroughly analyzed in Section 3.9 of the Draft EIS/OEIS.
Komer-01	The United States Navy requests permissions from the United States Department of Commerce (NOAA), to kill thirty two species of marine mammals over five years in their Pacific Ocean Warfare testing program. The expansion of their area of operation will include the State of Washington, the State of Oregon, part of the state of Idaho, and Northern California. The final date for public comment is April 13, 2009.  These designated areas will also include large areas of the Pacific Ocean from California to the State of Washington and areas along the border between the United States and Canada. Once implemented there is no date specified in E.I.S. for this Navy Warfare Testing Program to end although various documents show that this is a five-year Navy Warfare Testing program.	The Draft EIS/OEIS describes the potential "take" of 26 species of marine mammal. The term "take," as defined in Section 3 (16 USC 1362) of the MMPA, means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." The Navy anticipates only harassment and the potential for injury due to its training activities.  The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Komer-02	The United States Navy has also published an application, as an addendum to their program, in the U.S. Federal Register, dated March 11,2009. This application from the Navy"requests authorization to take individuals of 32 species of marine mammals during upcoming Navy Warfare testing and training to be conducted in the NWTR areas off the Pacific coasts of Washington, Oregon, and northern California over the course of 5 years."  The Navy Warfare Testing Program will "utilize mid- and high frequency active sonar sources and explosive detonations. These sonar and explosive sources will be utilized during Antisubmarine Warfare (ASW) Tracking Exercises, Mine Avoidance Training, Extended Echo Ranging and Improved	See response to comment #1 above.  Although NMFS and the Navy think that injury of marine mammals is unlikely when mitigation implementation is considered, the Navy's model predicted that (in the absence of mitigation) 13 individuals would be exposed to levels of sound or pressure that would result in injury and NMFS is proposing to authorize those Level A Harassments. No mortality is anticipated and NMFS is not proposing to authorize mortality.

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	Extended Echo Ranging (EER/IEER) events, Missile Exercises, Gunnery Exercises, Bombing Exercises, Sinking Exercises, and Mine Warfare Training"	
Komer-03	The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served upon the "Navy Warfare Chemical Menu" that will contaminate our air, water, and soil.  White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout of. White Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)	The proposed action includes no testing of weapons of mass destruction.  Neither depleted uranium nor white phosphorus are used in the NWTRC nor are they part of the proposed action.
Komer-04	The ocean areas off the coast of Northern California are not a suitable venue for the use of chemical tests, nor is it efficacious to test live ammunition, explosions of aerial or underwater ordnance. Aquatic mammals, fish, invertebrates and birds are resident and migratory animals in these waters that likely will be negatively impacted. Furthermore, the possible resulting damage to downwind human population seems highly suspect and may be the subject of future litigation.  I therefore implore you to not expand the Navy's test areas.	The proposed action includes no testing of chemicals, live ammunition, explosives, or other ordnance, but rather the training of Navy personnel with established weapons systems.
Konopik-01	Comment on Navy Training Plan: STOP!!!  Needless unseen but deadly consequences of new weapons systems, involving ships, jets, submarines and advanced sonar and the sinking of depleted uranium munitions to the sea floor.  Have you no sense of what havoc can occur to our environment in our beautiful but fragile waters of Puget Sound?  My son in law has already suffered the effects of depleted uranium usage in the 1st Gulf War.	The Draft EIS/OEIS analyzed the potential impacts of conducting required Navy training throughout the range complex, including the areas described in the comment. The purpose of this analysis is to ensure the Navy makes an informed decision on future training levels. Please see Chapter 3 of the Draft EIS/OEIS for the complete analysis of the potential impacts.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Kress-01	I am writing to you today to ask that the United States Navy curtail it's proposed increase in training activities on the Northwest Training Range	The informational meeting requested by the County Board of Supervisors was not a Navy meeting as part of the NEPA process. Therefore

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	Complex. I was not aware of the public meeting held here in Ukiah until 5 minutes before it started, and I stayed for the 5 hours the meeting lasted The room was full of concerned citizens like myself, and many of them stated they had learned about the meeting just by chance and at the last minute, as well.	notification of this meeting was not the responsibility of the Navy.  The Draft EIS/OEIS describes the potential "take" of 26 species of marine mammal. There are different levels of "take." The Navy does not anticipate any mortality takes, but only harassment takes.
	Many drove 1-2 hours to attend.  Very clear signals were given to the Navy that evening that the communities in this county will not stand for the loss of marine life and habitat, noise, pollution, and other detrimental behaviors proposed by the representatives who came to speak with us. Every single person in the room except for one opposed the idea that the Navy could "take" the lives of even one marine mammal, let alone 32 species and 3.5 million over the next 5 years! Even if it's just potential effects, they don't stop at some imaginary line in the ocean. I didn't believe you, Mrs. Kler, when you stated that the Navy was "a steward of the environment"! Actions speaks louder that words, and the	Although NMFS and the Navy agree that injury of marine mammals is unlikely when mitigation implementation is considered, the Navy's model predicted that (in the absence of mitigation) 13 individuals would be exposed to levels of sound or pressure that would result in injury and NMFS is proposing to authorize those Level A Harassments. No mortality is anticipated and NMFS is not proposing to authorize mortality.  Tables 3.9-6 through 3.9-12 in the Draft EIS/OEIS list the number of modeled exposures. The total number of all takes, including non-injurious harassment, is less than 130,000 per year, or less than 650,000 over 5
	consequences of your actions will and have proved that everything is connected.	years.  The U.S. Navy demonstrates its commitment to the environment in a variety of ways. First, the Navy invests millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.
		The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up
		past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Kress-02	Yes, we need a strong military. As a US. veteran, I am aware of the need for national security, but at what cost? How about conducting training in a dead zone?	Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Kress-03	How do you mitigate death? How do you justify "ambient" noise, like it has no	Ambient noise is the existing background noise in an area or an

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	potential harmful effects on all wildlife?	environment. The analysis in this EIS/OEIS considers the Navy-generated sound sources.
Kress-04	If the Navy's mission is to prepare for war, what would it take to change the mission? How about cleaning up the North Pacific Gyre? Are we really looking for oil?	This comment has been duly noted.
Kress-05	It seems strange that you would have only one or two government agencies, including the National Oceanic and Atmosphere Administration, who is responsible for the largest fish-kill in U.S. history, oversee your operations. We cannot trust their reports, and this is not an adequate check and balance system. More than NOAA and Fish and Wildlife Service needs to be involved, and just because you've been there for years doesn't mean you have to stay. The public has the right to know if the earth's natural resources are being squandered.	This comment has been duly noted.
Kress-06	Also, it was stated that there "may be" an increase of unmanned aerial systems from 12 to 112 missions, "most likely" in Puget Sound There "may also be" a 57% increase in training activities. I have to say that much of what was stated at this meeting was so ambiguous, and left the door open for the Navy to do basically what ever it wanted wherever it wanted. Commander John Mosher stated, "The Navy is vague intentionally - bad weather, mammals, ships - may drive us to different complex areas ". What reassurance do United States citizens (who you work for) have that you're not harming animals and plants, or polluting our waters? How would we even know? It was stated that what went on in the last 10 years is what we can expect - most of us didn't even know about that! And it was hard for me to believe that Commander Mosher is a kayaker and diver. Most people who dive love the oceans, and would go to great lengths to protect them.	This comment has been duly noted.
Kress-07	You have access to some of the best science on the planet, and are either in denial or are not taking advantage of a great resource. Thank goodness the Navy is under greater scrutiny. In the next 5 years, whales will migrate 10 times – how do we know you won't hurt them? In addition, the Pacific Coast is an upwelling area, making it nutrient-rich and attracting diverse populations of sea life, providing food and oxygen - allowing life to exist. Nearly all the marine resources we depend on come from a few small regions of the total ocean.	This comment has been duly noted.
Kress-08	What about white phosphorous, sonar, EM's, C02 and nano-particles?	The issues described in the comment were addressed in the Draft EIS/OEIS, except for nano-particles, which are not part of the proposed activities.  White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Kress-09	Bioaccumulation of drift in our water and air? Do bombs add to global warming?	This comment has been duly noted.
Kress-10	Why have more than one pod of whales stranded themselves in your	This comment has been duly noted.

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	complex and died? The Navy has a toxic legacy, and how do we know if the Navy cleans up it's mess? Is it even cleanup-able?	
	Our planet and oceans have almost reached the tipping point. The point of no return. We've lost 90% of our big fish, and 40% of the oceans and seas have grave damage done to them. We have dead zones around the world. Without the oceans, we cannot survive.	This comment has been duly noted.
Kress-11	As I listened to everyone in the room, I kept looking at our county logo on the wall, which depicts an orchard, a wave, and two redwood trees. We are rural communities who value the incredible bounty and serenity this area has to offer. The wave represents our Pacific Ocean which we rely on for food, recreation, diversity, and life itself Please do not compromise the values that we hold in the highest esteem. And please do not underestimate the tenacity and power dedicated community members hold An ounce of prevention is worth a life worth living.	
	This is my response to the Navy EIR. I feel that your study does not realistically evaluate the true impact of your testing proposal on threatened	All potential impacts discussed in the comment were thoroughly analyzed in the Draft EIS/OEIS.
Krouse-01	and unthreatened marine species, consider existing marine protection programs, nor does it consider the impacts on those citizens, who inhabit the Pacific Ocean and utilize it for their welfare. Your testing and game plan has too many problems in it. It puts too much at risk in our bountiful ocean and could bring some of those toxins on shore.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Krouse-02	I am concerned about the impacts on marine mammal communication (many considered endangered,)	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Potential interference with marine mammal communication was described
		in Section 3.9.2.1.
Krouse-03	friendly fish kills by explosive shock,	Approximately 350 explosive munitions would be used annually under the Preferred Alternative. This equates to approximately one per day across the expanse of the NWTRC OPAREA. The EIS analysis concludes that fish may be affected by the Navy's activities Alternative 2, and that individual fish may be affected, injured, or killed, but there would be no population-level effects.
Krouse-04	toxicity of phosphorous,	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Krouse-05	fuel leakage,	The analysis presented in the EIS is limited to the activities and

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		reasonable outcomes of such activities. As oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Krouse-06	and depleted uranium.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Krouse-07	I am also concerned about the impact on our commerce, which is focused on our ocean including tourism, sea weed harvest, and fisheries.	The potential economic impacts—including impacts to fishing and tourism—of the Navy's proposed action were described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Krouse-08	Furthermore, I am worried about the impacts of weather modification and atmospheric releases used to enhance communication and radar. Aluminum and barium and the bacteria they bring down is not good for our respiration or the animals that live here, nor is the exhaust from over flights or missiles that may release propellants into our air and ground water.	Neither weather modification nor atmospheric releases are part of the Navy's proposed action.
Krouse-09	Depleted Uranium is not necessary as Tungsten alloys are just as effective and do not have the radioactive nature that reeks havoc on all life. Many European countries use the safer tungsten technology. Depleted Uranium is dangerous according to testing and the reports of Veterans where this weapon was used. I do not want the Gulf war here.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Krouse-10	You can use virtual simulation to train your soldiers, air personnel and sailors at a significant savings to the American people and the resources that get consumed in weapon testing. I value the air, water and natural organisms and resources that make up this coast line and do not want it compromised. The North Coast of California and coast of Oregon and Washington are strong upwelling of fresh clean salt water that provides a unique ecology that I do not want to see compromised.  I am aware of the negative impacts in Hawaii, Puerto Rico and other testing sites and we do not want them here. Therefore we respectfully ask you not to do this testing in our precious ocean.  Thank you for hearing concerns.	Regarding the use of technological resources, as described in Section 2.3.2.2 of the Draft EIS/OEIS, "The Navy continues to research new ways to provide realistic training through simulation, but there are limits to realism that simulation can provide, most notably in dynamic multi-threat environments involving numerous forces, and where the training media is too complex to accurately model, such as sound behavior in the ocean. Although sound behavior in water can be modeled for general results, [Anti-Submarine Warfare] training simulation requires a degree of fidelity that exceeds current technology."  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating

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		broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Kulongoski; Governor of Oregon (Kulongoski)-01	I am writing in regard to the draft Environmental Impact Statement/Overseas Environmental Impact statement (EIS/OEIS) for the U.S. Navy's expanded use of the Northwest Training Range Complex off the Oregon coast. I recognize the importance of ensuring that our armed forces are well trained. Unfortunately, numerous Oregonians have contacted my office expressing frustration with the methods used by the Navy to inform them of the proposal. Many are also concerned about the potential effects that increased naval activity would have on marine wildlife, ocean access and safety, and water quality.  While I appreciate the recent decision to extend the EIS/OEIS comment period to February 18, 2009, one additional week does not provide the time required for the public to fully review and prepare comments on 1000 pages of technical information. Due to the Navy's failure to meaningfully engage the public in the development and review of this extremely complex proposal, I ask that you extend the comment deadline a full 60 days to April 11, 2009. The history of the Navy's outreach to Oregon residents on the Training Range Complex is an important factor in my decision to request a longer comment period. Practically the entire coast of Oregon is affected by the proposal, yet only two public meetings have been held: one during scoping and one recently as a part of the draft EIS process.  According to Navy representatives, the scoping meeting in the small community of Depoe Bay drew only four or five residents. The Navy's failure to conduct more extensive notification and outreach contributed to the lack of Oregonians tracking the proposal as it evolved. When the Navy held their January 30 public meeting in Newport on the draft EIS, many people were learning about this project for the first time.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Kulongoski-02	As Navy representatives witnessed during their visit to Oregon last month, local residents and state resource managers had many questions about the draft EIS. Therefore I also ask that two additional public meetings be held along the Oregon coast as soon as possible to allow for further exchange of information and perspectives. I will ask my staff as well as representatives of several state agencies to attend those meetings in order to encourage a productive dialogue.	An additional meeting was held in Tillamook, OR on February 26. Due to scheduling limitations and the relative lack of Navy activities near the Oregon coast, the Navy felt that this one additional meeting was more than adequate.
Kulongoski-03	Please anticipate receiving formal comment letters from state agencies such as the Oregon Department of Fish and Wildlife and the Oregon Department of Environmental Quality regarding the Navy's activities proposed in the draft EIS. I encourage you to seriously consider their concerns and accept their recommendations. Should you have any questions about the State of Oregon's interest in the Northwest Training Range Complex, please contact Jessica Hamilton on my staff at (503) 986-6543.	The Navy seriously considered every concern raised in public comments to the Draft EIS/OEIS. Each and every comment received was responded to in this Final EIS/OEIS.

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,	I can only support the "No Action Alternative."  Everyone in Washington State knows that Puget Sound is a very vulnerable	The full analysis of potential effects of the Navy's proposed activities to marine life is found throughout Chapter 3 of the Draft EIS/OEIS.
Laing-01	habitat. The health of the Sound has been continually deteriorating over the years. Declining fish populations and toxicity of sea mammals are a concern. For example, orcas now have so many toxic contaminants in their bodies, that if a dead one washes up on shore, its carcass has to be careful disposed of in a toxic waste dump. They are vulnerable to harm from sonar. And Orcas are only one species that would suffer. All would suffer, we just don't know to what degree.  Recently I attended the daylong conference sponsored by WSU called "Sound Waters." It was a full day of classes held where I live, on Whidbey Island, on how as citizens, we can all work together to save and improve Puget Sound. Citizens are doing a whole wide variety of things to improve the health of Puget Sound.  Many of us on Whidbey Island do a wide variety of things to help preserve ocean life in general and the health of Puget Sound in particular. We use minimal pesticides because eventually those chemicals end up in the sea. We bring our own bags to the grocery store to avoid plastic bags which so often end up in the sea causing the death of sea turtles and other creatures. We have learned not to collect creatures from tide pools. We carefully clean up after our dogs on the beach. At low tide we avoid stepping on seaweed because of the critters that live underneath. When we pick up rocks to explore what's underneath, we put it back in its original position so that those who hide and live beneath the rocks won't be disturbed or exposed. People who live on the water's edge and along stream banks do many more things to prevent pollution of the water. Many people on Whidbey Island volunteer time	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task
	as Beach Watchers and Beach Stewards. People here are much invested in the health of Puget Sound.  But what is the point of citizens being so conscientious if the Navy does wholesale damage to the Sound with increased explosives and damage to marine life with increased sonar? I feel that for the Navy to even consider expanding its activities in this area, shows that it is totally out of step with awareness and desires of people who live here. To increase testing of weapons and sonar is an uninformed step backwards. We need to do everything possible to preserve Puget Sound, not destroy it.  I have carefully read the Navy's materials on this proposal. I understand the need to train rookies on weaponry. I also understand the need to test out new technologies. But the Navy has not shown to me a reason to increase its activities in this area I see no urgency to increase these tests, but I do see an urgency to reduce harm to marine wildlife and the quality of the water in Puget Sound.  Therefore, I support the "No Action Alternative."	Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisherie Service.  In addition, the U.S. Navy has programs in place to manage threateneand endangered species on and around our installations; safely clear past hazardous waste sites for future reuse; explore and develop new greener technologies for equipment design and maintenance; and recometal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhoc cleanup projects.
Lamb 04	Reading the EIS I was struck by how this enormous number of words and terms could be used so vaguely. I found a constant lack of clarity about just	This EIS/OEIS fully meets the requirements of NEPA.  White phosphorus is not used in the NWTRC and is not part of the
Lamb-01	exactly what would be done, where, and a 'hedging of bets' that allowed pretty much anything to be done anywhere to the ocean and the air above it	proposed activities.

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	by the Navy from Washington down to the edge of northern Mendocino County in the vague name of "national defense" and "security."  The greatest dangers we face now are the rampaging pollution of our	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of
	environment, devastating climate changes threatening all life as we know it, and the continuing arrogance of those who don't clean up their mess.	training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the
	Life began in the ocean and life is now dying in the ocean. This is not just about "not in my backyard." The entire Northwest Pacific is one of the richest and most productive marine ecosystems on earth. We need to protect it, not destroy it in the name of saving "us" from "them".	earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	The Navy (indeed the whole defense department) needs to downsize its destructive experiments & focus its resources on the protection & restoration of the marine environment which it so cheerfully damages with bombs, white phosphorus, depleted uranium rounds, etc.	
	The Navy needs to clean up its mess. To pause & accurately assess the damage it has already done and continues to do to the precious waters that give us life and be part of the solution, rather than the problem	
Lamb-02	This EIS belittles or ignores the gross environmental damage to the ocean created by Navy war games & weapons tests.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Lamb-03	The vagueness continues with statement s like "may have coastal effects" (re Washington) or (re Oregon & California) "the Navy has determined that its Proposed Action will have no coastal effects." We are not told what action is proposed or how they arrived at their determinations.	The preferred alternative is clearly identified in the EIS/OEIS. All of the conclusions are supported with a thorough analysis throughout the EIS/OEIS.
Lamb-04	There is no description, for instance, of just how the past and present use of so-called depleted uranium rounds will be mitigated in terms of marine environment,.(nor white phosphorus, sonar, et al.) Nobody knows just how the phytoplankton, the whales, the fish, & the rest of the life of the ocean absorb and respond to these toxins.	Depleted Uranium and White Phosphorus are not used in the NWTRC. Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant. The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of

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		DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies." A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Lamb-05	The Navy should withdraw this EIS and do its homework. Do the research to scientifically describe what actually has happened to the marine environment when different types of weapons testing, etc are done, and clarify its objectives in the light of the immediate, devastating environmental crisis we face. Then let's discuss this with all the info in the table.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Lassegues-01	Just a note to tell you that this family has no problem that the USN is/will conduct in the Pacific Northwest area.  We appreciate all that you do to keep us safe.	Thank you for your comment.
Leech-01	As the father of a Naval Aviator, and as a retired Air Force officer among who's duties was command of an RC-135 squadron I appreciate the absolute need for the best training possible for aircrews. The value of an integrated and enhanced training range, specifically as proposed for the NWTRC, is that it will provide a broad area (sub-surface to exo-atmospheric) in which to train and exercise multi discipline platforms in a fully integrated fashion. The impact of the proposed enhancements to the NWTRC that will be apparent to me and my good neighbors on Guemes Island will differ little from that experienced today and will at worst be a mild and transient inconvenience. I am far more concerned with the potential costs-both as a citizen of the United States and the father of a Naval Aviator. if we should deny adequate training to weapon system operators in the coming years.  I support the full range of enhancements proposed for the NWTRC.	This comment has been duly noted. The Navy will consider all potential impacts as described in the Final EIS/OEIS before a decision is made. Your input in this process is appreciated.
Lincoln County	February 11 2009	The Navy's notification efforts exceeded the requirements of NEPA (40
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Legal Counsel- Wayne Belmont	On behalf of the Lincoln County, Oregon Board of Commissioners and joining Oregon's Congressional Delegation (see attached letter) in requesting an	CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
(Lincoln County)-01	extension of the comment period for the above referenced EIS/OEIS in order to fully review and comment on the proposal.	However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.
	March 9 2009 On behalf the Board of Commissioners, Lincoln County is submitting the	The errors in Section 3.14 concerning trawl and troll fleets have been corrected.
	following comments concerning the above referenced EIS and OEIS. Lincoln County joins with many local groups and individuals commenting on the proposal and specifically references, supports and incorporates the comments of the Port of Newport and Dr. Bruce Mate concerning the proposal into its position on this matter. We offer the following additional comments:  1. There is clearly a lack of understanding and knowledge expressed in the EIS and OEIS about both the operations of, and the potential conflicts with, Oregon's commercial fishing fleets. A glaring example of that basic lack of understanding is the inability to distinguish between the trawl and troll fleets as it relates to bottom fish. That is unacceptable. Commercial fishing involves different gear, fishing strategies, and locations depending on the ocean resource being harvested. The EIS / OEIS inadequately identify those resources and harvesting techniques and locations and therefore fail to	It is important to note that the activities of the proposed action take place in the same area and at approximately the same level as they have for decades. The fishing industry can expect no noticeable change in their level of interaction with the Navy in the NWTRC.
Lincoln County-01		There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
		Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
Lincoln County-02	2. Marine mammal impacts and integration with the Marine Mammal Act are concerns that need to be further addressed. The comments of Dr. Bruce Mate clearly identify deficiencies in the assessment of risk and in mitigation that must be corrected. We support Dr. Mate's comments and concerns.	The Navy is in full compliance with the Marine Mammal Protection Act and has engaged the National Marine Fisheries Service as part of this process. Dr. Mate has identified no specific deficiencies in the Draft EIS/OEIS. The EIS/OEIS analysis is thorough and complete.
Lincoln County -03	3. We are very concerned with the potential environmental and economic impact of planned residual marine debris (from shells and other sources) from the increased training proposed. A much more thorough examination of the impacts on our ocean ecosystem is needed.	A thorough and complete analysis of military expended materials was conducted and described in the Draft EIS/OEIS. Please see Sections 3.3 through 3.10 for analysis of potential impacts on each resource area.
Lincoln County -04	Thank you for the opportunity to submit these comments during the expanded comment period. Further opportunities to provide detailed information and understanding of our concerns, and to insure that adequate assessment of the proposal occurs before decisions are made, remains a	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment
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	priority for Lincoln County. Given the width and breadth of other comments made by concerned citizens, groups and local and state governments, we request that the Navy further expand its public involvement process to insure that proper stewardship of the ocean resources remains the first priority while meeting the Navy's training needs.	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Lincoln County-05	February 6 2009- to Congress:  We are writing to request an extension to the February 18, 2009 public comment deadline set for the draft Environmental Impact Statement/ Overseas Environmental impact statement (EIS/OEIS) for the U.S. Navy's expanded use of the Northwest Training Range Complex off the Oregon coast.  The EIS/OEIS was released on December 29, 2008 with an electronic copy available on the Northwest Training Range Complex website. However. many citizens who live in potentially affected areas along the Oregon coast have expressed concern and frustration at the lack of public notice and the limited time to provide official comments to the U.S. Navy. The EIS/OEIS is 1,068 pages of dense technical language and yet most Oregon coast residents were not aware of the proposal's existence until a January 30, 2009 public meeting in Newport, Oregon. In addition. coastal residents have raised questions and serious concerns about the impact of the Navy's plans on coastal fisheries, tourism, ongoing efforts to develop alternative energy sources, and marine mammal research.  We believe that successful and innovative projects in Oregon require an open, fair communication process between private businesses, government, and citizens. In light of the complex issues at stake and unanswered questions regarding the potential impact of the Navy's plans, we ask that you both extend the public comment period to April 11. 2009 and hold at least two additional public meetings in Oregon, including one in Tillamook County, to ensure that those who may be affected and wish to comment on the project may do so.  We appreciate your immediate attention on this matter. If you have any additional questions, please contact Alison Craig in Congressman Schrader's Oregon office at (503) 588-9100.	See response above.
Lipscomb-01	As a lifelong resident of the Pacific NW, and as a supporter of the Oregon State University Marine Mammal Institute, I am shocked that the Navy is considering increasing the use of high energy sonar along the West Coast. I spent a week last year observing and learning about the migration and communication of grey and blue whales; I am convinced they are some of the most advanced mammals on the planet. Their numbers are dwindling and must be protected, especially from such senseless weapons of mass underwater destruction as high energy sonar.  With all the technological resources available to the Navy, can't you figure out a way to get the results you want without causing untold damage to the most magnificent creatures in the oceans?  Please consider the long-term impact of these "experiments" and limit them	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Regarding the use of technological resources, as described in Section 2.3.2.2 of the Draft EIS/OEIS, "The Navy continues to research new ways

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	to the absolute minimum necessary, both in volume, and in number of applications.  Thank you for your consideration.	to provide realistic training through simulation, but there are limits to realism that simulation can provide, most notably in dynamic multi-threat environments involving numerous forces, and where the training media is too complex to accurately model, such as sound behavior in the ocean. Although sound behavior in water can be modeled for general results, [Anti-Submarine Warfare] training simulation requires a degree of fidelity that exceeds current technology."
Love-01	War practice leads to global warming. Simulation only!! No bombing off Northern California!!! The definition of Pacific is peace. No training for warplan for peace.	This comment has been duly noted.
Lucco-01	As a concerned citizen and resident of Fort Bragg, CA, I strongly object to weapons testing in the waters off our coast. This is a unique area known for productive upwellings, whale migration paths and sensitive fisheries. The community relies on what fishing remains plus tourism. These could be severely impacted by weapons testing.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Makah Tribe (Makah)-01	The Makah Tribal Council (MTC) appreciates the efforts of the US Navy in protecting our great country and recognizes that training must occur for our forces to be prepared for any and all threats. The Makah Tribe has many proud members who are Veterans of Foreign Wars and live in Neah Bay. The MTC recognizes the importance to the United States of maintaining strong armed forces through training. That said we hope to see that all training measures are conducted in as safe and responsible manner as possible to reduce risk to living marine resources to which the Makah Tribe depends.  The MTC would like to thank the Navy for previously extending an opportunity for consultation to the MTC prior to the release of the DEIS. Now that we have reviewed the document in some detail, it is apparent that there are a number of issues associated with the Navy's existing training exercises within our Treaty protected Usual and Accustomed Area (U&A) that we would like to present.  Risk of Damage to Treaty Protected Area from Oil Spills  When our ancestors signed the 1855 Treaty of Neah Bay with the United States they ceded 300 thousand acres of forested lands to the United States in exchange to reserve the right to continue to derive our traditional lifestyle from the sea. Our treaty area extends west from Port Angeles, Washington approximately 60 miles along the Strait of Juan Fuca to Cape Flattery and then continues west into the Pacific Ocean approximately another 50 miles. Our southern boundary proceeds south from Cape Flattery along the Outer Washington Coast approximately 25 miles. It is the protection of our various fisheries and marine resources that the MTC views as one of our fundamental responsibilities for our people and ancestors. Over one hundred and fifty years after we signed our treaty with the United States government, the Strait of Juan de Fuca has become a primary waterway route for oil tankers, cargo and passenger vessels and Navy ships bound to and from port facilities in Washington and British Columbia.	While the Navy fully understands the concerns spelled out in this comment, it is beyond the scope of this EIS to influence changes to the Navy's oil spill contingency plans.  The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed. Further, the increase in vessel traffic within the NWTRC does not correspond to an increase within the Makah's U&A but to a general increase throughout the range complex.  The Navy will continue to work with the MTC through established means to sustain both the viability of the range complex and the living marine resources in which the Makah Tribe depends. The Navy takes its responsibility seriously to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

contiguous United States, we understand our exposure to oil spill risk is high and is increasing. The Makah have the largest combined occaen fisheries of federally recognized Indian Tribes in the United States. Our Usual and Accustomed (U&A) marine treaty area is located at the crossroads of the Strait of Juan de Fuca and the Pacific Ocean. This places us at the entrance to a U.S. High Volume Port Complex, Canada is largest port and the world's third largest naval complex. These unique circumstances, combined with our experience as a "Resource Trustee" in addressing the impacts of the four largest persistent oil spills in Washington State history' fotaling approximately 3 million gallons of oil spilled on our natural and cultural resources, afford us extensive experience in this field.  The MTC whise to acknowledge the Navy's contribution to the initial stationing of the Neah Bay rescue tug. We view the multi-mission capability of the rescue tug as an essential piece to the overall protection of the Washington outer coastal region from the impacts of oil spills, For over 15 years the MTC has experiended thied resources to work closely with federal and state regulators and industry representatives to improve the recognition of including final governments into their oil pollution policies. These efforts and the appointment of Chad Bowechop on behalf of the MTC to the Regional Response Team/W Area Committee.  With the Puget Sound area being the homeport for the Navy's third largest. The Complex means that commercial vessels are not our only source of risk. The complex means that commercial vessels are not our only source of risk. The complex means that commercial vessels are not our only source of risk. The complex means that commercial vessels are not our only source of risk. The complex means that commercial vessels are not our only source of risk. The transfer of the tug Phylis Dunlap and its bare are after the natural control of the search source and the proper of the phylis pollutal parts to search and the pr	ID	Issue Text	Response Text
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		Brown who has generously shared her expertise. We believe that this new	

ID	Issue Text	Response Text
	proposal affords us an opportunity to implement some of the ideas that we have discussed with Tammy over the years and are prepared to bring this up in our consultation. Section 1-27- Describes Government-to-Government consultations and Agency briefings, while the concerns that were raised during these discussions are described, the document does not clearly state how these concerns were responded to in the DEIS.	
Makah-02	Impacts to Tribal Fishing Rights  Any training activities that restrict fishing activity during important fishery seasons, or activities that damage fishing gear, could drastically affect the economic welfare of our treaty fishermen.  Some fishing seasons, like sablefish (black cod) and halibut have management schemes that limit fishing pressure by limiting fishing to small periods of time called fishing openers. We would like the Navy to ensure that Naval training exercises will not be conducted when they can exclude treaty fishermen from usual and accustomed grounds during important openers.	Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting Tribal fishing practices.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will consult with representatives from affected tribes. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5.
Makah-03	Section 2.6.2.2 states concrete and sandbag anchors will be deployed for a portable undersea tracking range and that the anchors will be left at the site after the end of the test. Concrete anchors are likely to persist in the environment and could damage trawl gear of treaty fishermen. Our treaty trawl fishermen have learned where they can tow safely without damaging gear through trial and error and knowledge passed from father to son or from fishermen to fishermen. Adding an anchor to an area that our fishermen would normally have considered a safe trawl area will increase the risk of damaging and possibly losing fishing nets. Sandbags are more likely to disintegrate and have a lower potential to damage fishing gear. To minimize possible impacts to our treaty trawl fleet could you please state in the FEIS where the anchors will be deployed? Further, it would be beneficial for an analysis to be performed on where deployment of anchors will have the lowest likelihood of damaging fishing gear (i.e. areas of low bottom fish productivity). If anchors must be deployed in actively fished areas please include a requirement to only use sandbag anchors.	The locations of both the mine training range and the portable undersea tracking range have not yet been determined. This EIS/OEIS evaluated the potential impacts of conducting training on the ranges, not on the impacts of the installation. Should the Navy elect to move forward with either of these range enhancements, a separate environmental study would be conducted to evaluate locations and installation. During the process of this installation analysis, the Navy would consult with various stakeholders, including affected tribes such as the Makah Tribe.
Makah-04	In section 2.4.1.4 there is an analysis of electronic attack tactics, such as electronics jamming. Is there potential that bystander vessels will be impacted? If so, we fear for the safety of our fishermen and the recreational boaters that utilize the Port of Neah Bay due to the possible impacts of electronic attacks. Furthermore, the loss of electronics to large container ships or oil freighters may increase the risk of a catastrophic oil spill. There needs to be analysis that any closure areas for training exercises will be of sufficient size to avoid impacts to bystander vessels. There should be analysis on possible impacts to bystander vessels from electronic attack tactics in the FEIS in general.	The Navy operates electronic attack training exercises using established safety procedures that preclude hazards to nonparticipants such as commercial and recreational vessels.  As stated above, rather than close areas to traffic ,the Navy avoids other vessels when conducting hazardous training.
Makah-05	Impacts of Training Exercises on Living Marine Resources  We have reviewed the analysis of environmental effects with particular interest on analysis on marine fish and marine mammals. The potential for risk to marine mammals was computed with the base assumption that marine	As the comment noted, species would not be distributed uniformly throughout the area, but many would travel in groups, thereby creating small areas with high densities and large areas with reduced densities. It is in these small areas of high densities where marine mammals are very

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	mammal distributions are uniform in space. This assumption is an important	likely to be seen, and the Navy's mitigation measures would effectively
	tool for analysis but does not truly represent the distribution of marine mammals, and other living marine resources, in the environment. Marine mammals, seabirds, turtles, and fishes are known to concentrate in areas of high productivity. These areas are often associated with bathymetric features that lead to upwelling or oceanic sea surface temperature or sea surface height frontal zones. We appreciate the mitigation and monitoring measures that the Navy plans to use to minimize impacts on marine mammals, however, we believe impacts would be minimized to a much greater extent if training exercises avoided oceanic areas of high productivity. Avoiding areas of high ocean productivity will also reduce the likelihood that naval exercises will be stalled due to the presence of marine mammals.  Areas of high oceanic productivity can be detected using remotely sensed oceanographic data. Chlorophyll a can be monitored to identify areas of high productivity. Sea surface temperature and sea surface heights can also be used to identify highly productive frontal zones. Other areas have known bathymetry, like the continental shelf break, and have consistently high levels of productivity. We would like to see the addition of avoiding high productivity areas as a means to mitigation to reduce possible impacts of training exercises on living marine resources. We understand that some training exercises are designed to take advantage of bathymetric features and require certain training locations. If however training locations are elastic, we would like to see assurances in writing that remotely sensed oceanographic data will be used to determine high productivity areas to avoid.	reduce sonar or alter course to avoid interaction with the animals.  However, predicting where these increased densities will occur is typically not a mitigation measure the Navy can depend on. Instead, the Navy has a number of measures, developed in coordination with the National Marine Fisheries Service, that are effective at reducing impacts to marine mammals and other species.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from training exercises as proposed in the Draft EIS/OEIS.
Makah-06	Injury due to sound Throughout the analysis of impacts on fish, turtles, and mammals there was an overriding assumption that only sounds within the audible range of an animal could affect or injure the animal. This assumption may not be valid. Sound outside hearing range of man has been used in modern medicine to manipulate the body. Ultrasound is commonly used in physical therapy offices to encourage blood flow in injured joints. This process shows that sound outside hearing range can affect tissues of the body. Furthermore, the process causing gas bubble lesions in marine mammals is not well understood. Tissues other than tissues involved in hearing have shown gas bubble lesions in beaked whales thought to have been exposed to mid frequency sonar. For these reasons, it would be advisable to analyze the impacts of all sounds emitted at high energy levels on living marine resources and not just sounds within the audible range of the animal in question.  Thank you for your consideration. If you have any questions on the comments provided please contact Jonathan Scordino (360) 645-3176 or Chad Bowechop (360) 645-2130 from my staff.	The analysis on sound impacts to marine mammals was based on the most recent and best available science on the topic.  Other tissue effects, such as bubble growth, were considered in the Draft EIS/OEIS, using the latest research. While some of these effects are currently theoretical, there exists little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals. Having conducted similar training exercises for decades in the NWTRC, there is no documented proof of injuries to marine mammals from these activities.
Marine Mammal Commission (MMC) -01	To Whom It May Concern:  The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Navy's Draft Environmental Impact Statement/Overseas Environmental Impact Statement	Responses below under specific comments.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

(DEIS) evaluating proposed activities in the Northwest Training Range Complex. The complex includes approximately 122.440 mize of surface and subsurface ocean operating areas located both inside and outside U.S. territorial waters off Washington, Oregon, and northern California, plus additional restricted land areas and air space. The analyzed activities include aircraft combat maneuvers: missile, bombing and gunnery exercises; use of explosives in shipsinking exercises; mine warfare; special warfare; explosive ordnance disposal; and the use of shipand helicopter-based sonars and sonabuoys in amti-submarine warfare exercises. Thire alternatives are considered in the DEIS: one purportedly consistent with the levels of activity in prior years (the Navys "No Action" alternative), another with an articipated increase in activity (alternative 1), and the last with a further increase in activity-(alternative ,2). The Navy prefers alternative 2.  RECOMMENDATIONS The Marine Mammal Commission recommends that the Navy- • revise its Northwest Training Range Complex DEIS to include a description of past activity levels to verify that the activity level proposed under the no-action alternative is indeed appropriate; • revise its DEIS by incorporating a set of explicit and clear metrics th-'t the public and decision-makers can use to make more informed judgments about the benefits and costs of various types and levels of activity; • revise its DEIS by include an alternative involving a reduction in activity to ensure that decision-makers are fully informed and presented with a full range of alternatives; • revise its DEIS by limiting its scope to those proposed activities that can be described in sufficient detail to provide a reliable basis for assessing benefits and costs: • revise its DEIS to reliable the effectiveness of monitoring and mitigation measures before beginning, or in conjunction with, operations under the final environmental impact statement and anticipated issuance by the National Marine Fisheries Service of	ID	Issue Text	Response Text
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authorization.		authorization.	
RATIONALE			
The Commission's rationale for its recommendations is as follows.			
Selection of Alternatives  The Marine Mammal Commission recommends that the Nawy revise its  The Marine Mammal Commission recommends that the Nawy revise its			
Northwest Training Range Complex DEIS to include a description of past  year. But the No Action, or baseline level of training activity has been			
MMC -02 activity levels to verify that the activity level proposed under the no-action relatively constant for several years, while the types of activities have	MMC -02		relatively constant for several years, while the types of activities have
alternative is indeed appropriate.  been occurring in this area since the early 1900's. Therefore the description of previous years' level of activity is the description of the No			
In an environmental analysis, the no-action alternative provides an essential Action Alternative.		In an environmental analysis, the no-action alternative provides an essential	

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	baseline to ensure that the full effects of a proposed action are described to the public and decision-makers. At its most basic level, "No Action" means just that-the action agency does not undertake the proposed action in any form. An action agency also can use the no-action alternative to represent its current level of activity. However, it should only do so if the effects of the current level of activity have been described in a previous analysis (the preferred approach) or are described in the current analysis. In this DEIS, the Navy is using the no-action alternative to indicate its current level of activity. The implication is that the type and level of activity and its environmental effects will not change. However, the type and level of activity in previous years have not been described, and it is therefore not possible for the public or decision-makers to verify that such is indeed the case. Although readers could simply assume that the activities described in the no-action alternative are consistent with those in past years, that assumption seems inconsistent with the generally increasing trend in naval activities in recent years. Furthermore, failure to provide supporting information for such a key element of the DEIS seems inconsistent with the intent of the National Environmental Policy Act. For that reason, the Marine Mammal Commission recommends that the Navy revise its Northwest Training Range Complex DEIS to include a description of past activity levels to verify that the activity level proposed under the no-action alternative is indeed appropriate.	
MMC -03	The Marine Mammal Commission recommends that the Navy revise its DEIS by incorporating a set of explicit and clear metrics that the public and decision-makers can use to make more informed judgments about the benefits and costs of various types and levels of activity.  The underlying premise for this analysis (and similar analyses for other Navy ranges) is that certain levels of activity are essential to maintain national security readiness. However, in this and previous DEISs, the Navy does not describe metrics that the public and decision-makers can use to evaluate the various activity levels in terms of their potential benefits to readiness and their potential costs to the environment. Rather, the Navy simply asserts that certain levels of activity are necessary to achieve readiness without substantiating that claim. The Commission believes that the public and decision-makers can make informed decisions only if they have clear measures of benefits and costs over a wide range of activity levels. To that end, the Marine Mammal Commission recommends that the Navy revise its DEIS by incorporating a set of explicit and clear metrics that the Navy, the public, and decision-makers all can use to make more informed judgments about the benefits and costs of various types and levels of activity.	In Chapter 1 of the Draft EIS/OEIS, the lead agency for this action explained the necessity not only for training in general, but specifically for training in the NWTRC. The requirement for a discussion of purpose and need in an environmental impact statement under the CEQ regulations is to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. §1502.13. This discussion, typically one or two paragraphs long, is important for general context and understanding as well as to provide the framework in which "reasonable alternatives" to the proposed action will be identified.  The lead agency the federal agency proposing to take an action has the authority for and responsibility to define the purpose and need for purposes of NEPA analysis. This is consistent with the lead agency's responsibilities throughout the NEPA process for the "scope, objectivity, and content of the entire statement or of any other responsibility" under NEPA. 42 U.S.C. §4332(D); see also, 40 C.F.R. §§1501.5, 1506.5.  Federal courts generally have been deferential in their review of a lead agency's purpose and need statements, absent a finding that an agency acted in an arbitrary or capricious manner.
MMC -04	The Marine Mammal Commission recommends that the Navy revise its DEIS to include an alternative involving a reduction in activity to ensure that decision-makers are fully informed and presented with a full range of alternatives. the Navy's DEIS for the Northwest Training Range Complex does not sharply define the issues because it excludes alternatives that involve a	The statement of the purpose and need for the agency action appropriately defines the range of alternatives to be addressed in an EIS. In identifying the purpose and need for a major federal action, the agency must consider the goals of Congress, such as those expressed in the agency's statutory authorization to act. With regard to the NWTRC, the purpose and need for the agency action is clearly defined in the Draft

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	reduction in activity. A decision maker informed solely by this DEIS would only be able to evaluate and choose between maintaining the current level of activity or increasing it. However, a decrease in activity may be required under certain fiscal conditions, reasonable under certain security-related conditions, or necessary under certain environmental conditions. The approach taken in this DEIS constrains the public and decision-makers rather than fully informing them because the Navy has not described the benefits and costs associated with a reduction of activity. Therefore, the Marine Mammal Commission recommends that the Navy revise its Northwest Training Range Complex DEIS to include an alternative involving a reduction in activity to ensure that decision-makers are fully informed and presented with a full range of alternatives.	EIS/OEIS. Alternatives to be evaluated should be those that reasonably satisfy the specific purpose and need for the agency action. The DEIS appropriately limits its analysis to reasonable alternatives that meet the purpose and need of the action.  As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
MMC -05	The Marine Mammal Commission recommends that the Navy revise its DEIS by limiting its scope to those proposed activities that can be described in sufficient detail to provide a reliable basis for assessing benefits and costs. Finally, the Navy prefers alternative 2, which involves the highest level of activity but also is dependent upon factors not yet determined or reliably predicted (e.g., congressional direction and funding, internal Department of Defense strategic decisions, future national security concerns). It therefore seems premature, and out of keeping with the intent of the National Environmental Policy Act, to request what amounts to a blank check for speculative increases in future activity. If those future activities cannot be described in detail, then their environmental costs also cannot be described and decision-makers cannot make informed decisions about them. To comply with the National Environmental Policy Act, the Navy should base its alternatives only on those types and levels of activity that can be described in sufficient detail for a meaningful risk-benefit analysis. It can then supplement its analyses and any related permits or authorizations at the point when future circumstances can be described with sufficient detail to inform decision-makers about the potential costs and benefits of alternative actions. History tells us that many of the factors that should be considered in determining the effects of future Navy actions (e.g., budget, threats to security, military technology, environmental conditions) will change over time. Therefore, the Marine Mammal Commission recommends that the Navy revise its DEIS by limiting its scope to those proposed activities that can be described in sufficient detail to provide a reliable basis for assessing benefits and costs.	It is the responsibility of the lead agency to determine the Preferred Alternative, based in part on the variables and contingencies described in your comment. The lead agency for this action, Commander Pacific Fleet, has determined that Alternative 2 provides the greatest flexibility for expected future training requirements.  It is equally plausible that budget, threats to security, military technology, and environmental conditions could change such that greater training was required than was analyzed in the No Action Alternative. If the lead agency had not analyzed an alternative with increased training— Alternative 2 in this case—then the decision maker would have no measure of the potential environmental impacts of that increased training. The Navy disagrees with the logic of the comment and maintains in this Final EIS/OEIS that Alternative 2 is the Preferred Alternative.
MMC -06	Scientific Peer Review of Marine Mammal Density and Distribution Estimates  The Marine Mammal Commission recommends that the Navy subject its reviews of marine mammal density, distribution, behavior, and habitat use to scientific peer review.  The Navy has done a commendable job of reviewing the existing literature on marine mammal density, distribution, behavior, and habitat use in this and similar documents. The resulting reviews are used to estimate animal density and distribution and therefore are an important element of the risk estimation	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.

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	procedure. However, the manner in which the literature is used to form conclusions about density, distribution, behavior, and habitat use has not been subjected to normal scientific process. In particular, the numbers used in the DEIS to estimate risks are derived mainly from two Navy-contracted reports that have not been subjected to scientific; peer review; these reports are Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area and Marine Resources Assessment for the Pacific Northwest Operating Area. The Commission has previously recommended that the Navy subject its analytical procedures to scientific peer review, which constitutes one of the fundamental elements of the scientific process. Because the Navy bases its training decisions, in part, on perceived risks to marine mammals, and the Navy's use of existing data to estimate those risks has not been subjected to peer review, the reliability of the Navy's decisions is called into question. To reduce such uncertainty, the Marine Mammal Commission recommends that the Navy subject its reviews of marine mammal density, distribution, behavior, and habitat use to scientific peer review.	
MMC -07	Monitoring and Mitigation  The Marine Mammal Commission recommends that the Navy develop and implement a plan to validate the effectiveness of monitoring and mitigation measures before beginning, or in conjunction with, operations under the final environmental impact statement and anticipated issuance by the National Marine Fisheries Service of an incidental harassment authorization.  Monitoring and mitigation measures determine, at least in part, the extent to which anticipated risks are detected and managed effectively. The Navy has established an Integrated Comprehensive Monitoring Plan to monitor, mitigate, and assess the effects of its activities over time. If properly implemented, the plan will improve both our understanding of the effects of sound from military activities and our ability to monitor and mitigate such effects. The Marine Mammal Commission strongly supports the development and implementation of this plan.  At present, however, the DEIS for the Northwest Training Range Complex seems inconsistent with that long-term assessment plan because it does not convey realistic estimates of performance for proposed mitigation measures and does not contain a concrete plan to verify and validate the levels of performance of watchstanders or other mitigation measures. The Commission continues to believe that the probability of detecting marine mammals using existing monitoring measures, and the subsequent likelihood of implementing necessary source-level reductions and other mitigation measures, are far lower than implied in the Navy's DEIS. The Commission	The Navy, in cooperation with the National Marine Fisheries Service, is developing mitigation measures and a monitoring plan for Navy activities in the Northwest Training Range Complex.
	also believes that the Navy is capable of conducting the tests needed to characterize the effectiveness of monitoring and mitigation measures. The knowledge gained from such tests would justify the relatively small effort and time required. Such assessments of system performance are standard Navy procedure, and the Navy has conducted such tests to evaluate the effectiveness of monitoring and mitigation measures for similar operations (e.g., SURTASS LFA). For these reasons, the Marine Mammal Commission	

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	recommends that the Navy develop and implement a plan to evaluate the effectiveness of monitoring and mitigation measures before beginning, or in conjunction with, operations under the final environmental impact statement and anticipated issuance by the National Marine Fisheries Service of an incidental harassment authorization.  Please contact me if you have questions about any of our recommendations	
	or comments.	
Martensen-01	I have read the EIS report, but I have also read conflicting information from marine biologists and scientists confiding that underwater sonar testing is damaging to marine animals who rely on their own sounds for navigation. The proposed plan seems to be at odds with the current administration's moves to downsize military spending. Both the environmental risks and the expansion costs are concern enough to be opposed to this plan.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Martin-01	I'm writing in regards to the proposal of having increased flyover Operations from NAS Whidbey. I have lived on Guemes Island for over 25 years and have patiently had to put up with Naval jets flying low and dirty over my house disturbing my peaceful way of life here (we contested this years ago, but to no avail). When your jets fly over, everything has to pause (telephone conversations etc.) while we wait for the deafening sound to pass until all of nature can once again try to resume its peaceful way of life. If the Naval Base is truly considering doubling these flyovers, then I'll most likely be forced to move somewhere else for my own sanctity and quiet. I don't think NAS Whidbey should be allowed to inflict this kind of noise invasion at any time (day or night) on innocent citizens and nature - it just isn't right.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Martinez-01	Do not expand testing along the OR Coast.	This comment has been duly noted.
McKee-01	The Mendocino coast is one of the few pristine, untouched habitats the whales and other oceanic species have left on the Pacific Northwest. The sonar based testing is most disturbing to me because of the undoubtable damage it will cause whales and dolphins. There are many existing military bases such as San Diego where the sea life has already been damaged, the oceanic ecosystem already disturbed. Why not conduct testing there?  Please don't desecrate our sacred Mendocino coast.	The NWTRC is not located off of the Mendocino coast. Within the NWTRC, the U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Mendocino County Board of Supervisors (Mendocino-John Pinches) -01	On behalf of the Mendocino County Board of Supervisors, I am writing to express our serious concern regarding the United States Navy's Weapons Testing Program Draft Environmental Impact Statement (EIS/OEIS).  Unfortunately, the US Commander of the Pacific Fleet has given the citizens	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	in the service area a very short time period in which to comment on the draft EIS/OEIS, published on December 30, 2008. The public comment period for the United States Navy's Weapons Testing Program Environmental Impact Statement (EIS) concludes on March 11, 2009. This document consists of approximately 1,000 pages of highly technical, complex materials for which the public should be afforded the opportunity to adequately assess and respond to the proposed environmental document.  The County of Mendocino strongly urges the US Navy and US Department of Defense to extend the public comment period by 30 days, to end on April 11th, 2009 to allow time for the County to fully review the Draft EIS/OEIS.	
Mendocino-John Pinches -02	The proposed expansion of the service area of operation will include areas of northern, coastal Mendocino County, yet no public hearings were held anywhere throughout the county during the comment period and no notification was publicly distributed in our area prior to the February 2, 2009, hearing in Humboldt County.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action. The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.
Mendocino-John Pinches -03	The current proposal to expand ocean and land-based operations, conduct underwater demolitions, and test electronic communications, explosives and surveillance systems so as to increase baseline levels of training activities, may have considerable negative impacts to human and marine life in Mendocino County. We are seriously concerned about potentially harmful impacts to water quality, marine habitat, fisheries, the local commercial and recreational fishing industry, and the nesting and migration of numerous avian species. More specifically, we are highly concerned about the project's potential to cause psychological, physiological and behavioral harm to marine life from the introduction of new, non-native, mid and high-frequency active sonar. This is of great concern to the County, as it would be a first-time introduction of this technology to Mendocino County's delicate marine environment.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Mendocino County Board of Supervisors (Mendocino- Carre Brown) -01	We would like to express our gratitude to Commander John Mosher, Project Manager; Kimberly Kler, Environmental Planner and Project Technical Representative; and Brian Wauer, Project Operations Specialist, who appeared before the Mendocino County Board of Supervisors on March 31, 2009, pursuant to our request, and at the urging of Congressman Mike Thompson, where they made an informational presentation and responded to the concerns, questions, opposition, and in one case, support, for the project, expressed by over thirty speakers at a public meeting attended by more than	See responses to specific comments below.

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	100 citizens. They also responded to questions and concerns by individual Board members. We appreciate their professional and informational presentation, and especially their stamina in presenting and fielding responses for the nearly five hour meeting.	
	We are writing to express our Opposition to Preferred Alternative No.2 for the Navy's Northwest Training Range Complex as described in the Environmental Impact Statement (EIS) and Overseas Environmental Impact Statement (OEIS) for the U.S. Navy Weapons Testing Program. We are concerned that the relevant documents do not adequately describe existing environmental conditions, baseline training operations or future training operations. Further, we do not believe that the environmental and cumulative impacts are properly analyzed and therefore it is not surprising that the proposed mitigation measures are inadequate to protect marine mammals and other marine species. We are particularly concerned about the unnecessary and preventable impacts to fisheries and marine mammals attributable to sonar that will be the likely result of implementation of Preferred Alternative No.2.	
Mendocino-Carre Brown-02	We believe the EIS and/or Alternative No.2 are environmentally deficient for the following reasons:  • Incomplete data. The EIS contains a paucity of data regarding existing environmental conditions, baseline data for populations of marine mammals and fish species, baseline data for existing training activities and impacts to marine species, as well as projected impacts of future training activities.	The Draft EIS/OEIS meets or exceeds NEPA requirements in each of the areas mentioned in the comment. Without more detailed information about where the commenters feel the analysis is lacking, no further response can be offered.
Mendocino-Carre Brown-03	• Environmental impacts. The Navy does not properly analyze environmental impacts that its sonar training will likely have on the endangered Southern Resident killer whale, migrating gray whales and marine mammals and species in general. We are concerned that the Navy has adopted methodologies that are not accepted in the scientific community while at the same time ignoring relevant information that favors a more protective approach. Therefore, the thresholds established by the Navy for assessing impacts to marine mammals are likely set too high and as a consequence, the 129,112 annual estimated "takes" of marine mammals is likely to be significantly understated. We also question whether all mammals that are exposed to sonar above ambient noise levels are included in those counted as "takes," as the Navy stated at the meeting. It is our understanding that the threshold level for temporary and permanent injury, as well as behavioral effects, are set significantly higher than ambient levels.	The Draft EIS/OEIS used the most current, relevant scientific information, in many cases in coordination with the National Marine Fisheries Service, to develop the analysis on sonar training and potential impacts to marine mammals. The analysis is very thorough and complete in this regard. The Navy feels the estimated "takes" (found on Table 3.9-12 of the Draft EIS/OEIS) are overestimates for numerous reasons, three of which are described below:  1) Where a range of density estimates existed, or where densities were seasonal, the modeling considered only the greatest density. This assumption leads to more animals within a sonar's range, and therefore more takes.  2) The modeling estimates do not consider the positive impacts of the Navy's mitigation measures. In reality, many of the estimated takes (primarily PTS and TTS) would be eliminated due to power down procedures in place as a marine mammal approaches a sonar source.  3) All surface ship sonars are modeled as the more powerful SQS-53C, when in reality, 60% of all surface ship sonar hours proposed are significantly less powerful (225 dB compared to 235 dB of the SQS-53C). The current threshold levels set for permanent and temporary injury were well explained in Section 3.9.2.1 of the Draft EIS/OEIS, and are intentionally higher than ambient levels. Behavioral harassment thresholds are set at significantly lower levels, as explained in this same

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		section.
Mendocino-Carre Brown-04	Fisheries impacts. Fisheries resources in California have declined precipitously in recent years due to a variety of causes. The presence of a viable fishing industry helps define the rural character of Mendocino County and contributes directly and indirectly to our local economy, including providing a significant cultural and epicurean backdrop for the local tourist industry. Anything that negatively impacts the fishing industry also negatively impacts our local tourist industry, economy and character. We are concerned that there seems to have been no meaningful effort to identify essential fisheries habitat for commercial fish species or to quantify in any meaningful way the potential impacts. The EIS acknowledges that there will be mortality and injury associated with training activities but without providing any meaningful analysis peremptorily concludes that there will be no significant impacts.	The proposed action includes increases in the number of certain activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or at-sea time for the ships. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  It is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  The Draft EIS/OEIS concludes that there would be no adverse effects on fish populations or fish habitat. It is clear that individual fish will be affected, but the numbers of fish affected are low and as such will not impact the overall populations of those particular species.
Mendocino-Carre Brown-05	• Cumulative Impacts. The EIS lists projects that could have a potential cumulative impact, but does not provide the appropriate analysis. We are also concerned that statements were made at the meeting that indicated a lack of knowledge of or effort to discover, quantify or assess the degree to which other branches of the armed forces might be operating in the same areas and therefore creating further need for cumulative impacts analysis.	The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.
Mendocino-Carre Brown-06	Alternative analysis. The alternative analysis only considers three options: maintain the status quo, conduct training, or conduct more training. A meaningful alternatives analysis would have included a broader range of options.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).
Mendocino-Carre Brown -07	• Mitigation Measures. The Navy fails to propose measures that would effectively limit the harmful impacts of sonar and other training activities on marine wildlife. The Navy has adopted more practical safeguards to limit the impacts of sonar for other training exercises and should do so here. Training exercises should be excluded from all coastal waters between the shoreline and the 100 meter depth contour. Consideration should also be given to avoiding lower continental shelf waters behind the 500 and 2,000 meter depth contours. Further, the Navy should rely on the technique called "simulated geography' in order to avoid undersea canyons; should identify and avoid essential fisheries habitat; should restrict sonar use at night when marine mammals are harder to detect; and should minimize the use of sonar from multiple sources at the same time. In addition to avoiding areas of high marine mammal populations, the Navy should also schedule training exercises to avoid conflicts with the gray whale migration season and routes.	The Navy and the National Marine Fisheries Service (NMFS) collaborated on the mitigation measures proposed in the Draft EIS/OEIS. The Navy believes these measure are very effective.  Other restrictions such as recommended in the comment were considered in the Draft EIS/OEIS in Section 5.2.1.5 – Alternative Mitigation Measures Considered but Eliminated. This section explains why these measures fail to provide any added protection to marine species.
Mendocino-Carre Brown-08	Target vessels. Concern has been expressed that the target vessels proposed to be sunk at sea may contain unacceptable levels of toxic contamination. The EIS should discuss the steps that will be taken to	As described on p. 3.3-18 of the Draft EIS/OEIS, the target vessels are cleaned in accordance with U.S. Environmental Protection Agency (USEPA) guidelines.

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	alleviate this concern.	
Mendocino-Carre Brown-09	California Coastal Commission (CCC) Consistency Determination. We urge the Navy to seek a consistency determination from the CCC without further delay, and urge the Navy to voluntarily adopt comparable mitigations to those required by the CCC for the Southern California Training Range.	The Navy will ensure compliance with the Coastal Zone Management Act.
Mendocino-Carre Brown-10	We wish to reiterate our concern regarding potential significant impacts to our already dwindling fisheries resources. Our fisheries are already subject to species specific harvest reductions and prohibitions as well as reduced or closed seasons. We can ill afford any further impacts to this irreplaceable resource. We note with some frustration that it is difficult to get a definitive answer regarding the level of training that may take place off the Northern California Coast, but we are assured that the level of activity is likely to be modest. However, there appears to be nothing to guarantee that should the training range be approved. Accordingly, we urge you to avoid any training activities in our waters that are likely to have a negative impact on fish or fisheries habitat.  We are fully supportive of the need for the Navy to properly train to maintain a high state of proficiency and readiness to safeguard our nation and our naval personnel. However, we are confident that the training mission of the Navy can be accomplished in a way that is compliant with environmental principles and relevant environmental laws. We urge the Navy to adopt mitigations that will be protective of the marine environment and that will limit the potential adverse environmental impacts to marine mammals and fish species from the Navy's proposed alternative No.2 for the NWTRC.  If it is true that the Navy does "everything we can" to mitigate potentially significant impacts of the training exercises, as was stated at the meeting, then it should not be difficult to adopt the mitigations requested here, many of which have been adopted in other areas. This would be consistent with the statement made at the meeting that the Navy takes a proactive approach with regard to environmental compliance.  Further, we request Congressional hearings be held to review the issues we have raised and to assure that optimum training levels are maintained while environmental values are protected.	As described in the Draft EIS/OEIS, the Navy is confident that its training activities will not impact fisheries off Northern California.
Miller J-01	Back in the late 1980s, a sharp rise in operations at NAS Whidbey and the resulting spike in noise complaints led the Navy to concentrate A-6 and EA-6 traffic over Guemes Island. The community organized and very effectively expressed their outrage for more than two years until the Navy rescinded their decision and resumed a more random distribution of flights over the region.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey
	Now, the Navy considers nearly doubling operations for the Northwest Training Range Complex of what may be noisier aircraft and we are alert and wary.	Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
	We came across a recent RFP entitled "Noise Reduction for Military Airfields and Surrounding Areas" [Navy SBIR 2009.1 -Topic N091-0 16] which	Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced

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	proposes to study and apply noise mitigation procedures employed by civilian air traffic to military overflights of civilian populations, specifically listing the F/A-18 and EA-18 aircraft.	the EA-6B.
	We thought NAS Whidbey might be an ideal candidate and participant, given its plans and nascent procedures in converting to EA-18 aircraft. Optimizing flight parameters here could really make a difference in the local noise politics and potentially temper civilian reaction to expanded operations.	
	My question for you, then, Captain David, is this: Will the communities surrounding NAS Whidbey suffer a sharp increase in noise levels and the same indifference to our experience we did almost twenty years ago or will the Navy choose another way?	
	I am writing this letter to register my opposition to the Navy Warfare Testing program Expansion on the coast of northern California.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the
Miller M-01	Historically our costal waters have been home to some of the richest and most diverse plant and animal life in the oceans of the world. In this era of declining resources and increasing risk to our planet we can not afford to put our costal ecosystem at further risk. It is short sighted and irresponsible.	range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
	As a U.S. citizen and voter I vote NO to the Navy Warfare Testing Program Expansion.	
	Comments included here should be attached to the documents FedExed to Kimberly Kler at your facilities on 2/16/09 to arrive by noon on 2/17/09 Tracking #9263 6361 4423.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	There are preliminary comments on NWTRC EIS/OEIS. Because more information and documents are being researched, further comments and attachments are planned when the Sec. of the Navy extends the Public Comment period and more Public Hearings are scheduled with adequate notification required by the National Environmental Policy Act (NEPA)	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	A copy of NEPA policies and requirement referenced and included here provided our group with the necessary guidelines in determining that the materials provided by the Navy on NWTRC EIS/OEIS failed to meet NEPA requirements.	The Navy determined how many EIS copies to distribute and to which public repositories based on locations with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a
Mills C-01	As one who attended and spoke at the Jan. 30 public hearing in Newport after learning of it at 4 p.m. the day before (Jan. 29) from a Portland contact who read of the meeting in the Seattle Post-Intelligencer. I make the	limited publication and distribution budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F.
	following comments with no reservations that the public comment period should be extended and at least there more public hearings be scheduled at three locations along the 362 mile Oregon Coastline. Why? Because three hearings were held in there Washington communities along a Pacific coastline half the size of Oregon's and with smaller populations than a number of Oregon's larger commercial and recreational fishing and seafood communities.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
	As a journalist and long-time board member of the unnotified Oregon Shores Conservation Coalition, my major objection about the Jan. 30 hearing is with the abjectly inadequate efforts made by the Navy to inform the Oregon public about the public hearing held at the Hatfield Marine Science Center in	Additional Draft EIS/OEIS copies were sent to region libraries, with the Lincoln County Library as one recipient. It was the Navy's intent to include cover letters in all copies that were mailed out. However, it is possible that

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	Newport.	the cover letter was omitted from this copy.
	In fact, in calls made by our group to the one Oregon newspaper listed in the EIS Executive Summary to be notified and the one Oregon library were the EIS two-volume document was to be available for public review, we learned that the Lincoln City News-Guard learned of the Jan. 30 hearing on Feb. 3 after citizen questions and going online to find out on its own.  Our group then contacted a Lincoln County Driftwood Library staff person	A number of media were contacted to notify Oregon citizens of the January 30 public hearing. In addition to the <i>Federal Register</i> notice, advertisements were placed in the <i>Newport News-Times</i> on five separate dates beginning in December, all before the public hearing, Also, news releases were provided to the Associated Press (National) and to the <i>Newport News-Times</i> . Meeting flyers were also posted in Newport,
	who found the 1000-page EIS still in a shipping box with no cover-letter explaining its time-related purpose. So on Feb. 9., 10 days after the Jan 30 hearing, the two-volume document was finally catalogued and shelved	Oregon at the Chamber of Commerce, U.S. Post Office, the Newport Public Library, and the Oregon Coast History Center.  Finally, an additional meeting was held in Tillamook, OR on February 26.
	In point of fact, no print media, no public library and no Oregon citizen was properly notified of the Jan 30 public hearing.	
	The few citizens who did attend on the 30th learned overnight or only a few hours before the hearing mostlyby word of mouth. By failing to comply with the NEPA public hearing requirements, the Jan 30 hearing is invalid and the Feb. 18 public comment period is invalid. Consequently, the Oregon Congressional Delegations's request to the Sec. of the Navy, William Winter, to extend the public comment period to April 11 and to provide more public hearings should happen immediately and Oregon citizens should be informed immediately.	
	Then the Navy's Public Affairs staff should send notices of the hearings to all 15 Oregon coastal newspapers in the seven coastal counties. See attachments FedExed on 2/16/0+ for their listings.	
	Copies of the two-volume EIS should also be placed in at least three coastal community libraries with notices of their location included in the 15 coastal newspapers.	
	One minor exception to the Navy's inadequate efforts to inform the Oregon public of the Jan. 30 hearing was a poorly designed 3 ½" x 6" ad which appeared in several back-page issues of the Newport News-Times. The five hearing locations in Washington, Oregon, and California were stacked in black ink and set in 6 and 8 point type with the Newport event near the bottom of the page.	
Mills C-02	Evaluation Alternatives  Based largely on Jan. 30 testimonies by Terry Obteshka of the Newport City Council, David Jincks with Midwater Trawlers and Pacific Whiting coop, Terry Thompson as fisherman and Lincoln County Commission, Bruce Mate, an international marine mammal authority and others, none of the alternatives provided in the wire-bound public hearing materials are acceptable.	The Draft EIS/OEIS fully complied with NEPA in its selection of alternatives and analysis of the potential impacts of the Navy's proposed activities.
Mills C-03	Significantly, when the four Navy panelists were asked what activities are currently underway in Oregon waters as mentioned in the No Action Alternative, no panelist chose to provide an answer. Asked a second time, it appeared either no panelist knew about any ongoing activities or was willing to disclose what they are.	As was stated at the beginning of the public comment period at the meeting described in the comment, "The primary purpose for this portion of the hearing is for the panel members here to listen to your comments firsthand. They will not be answering questions during this phase of the proceedings. Comments and questions will be addressed in the Final EIS." [Official Transcript of Proceedings, Newport, Oregon, January 30,

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Mills C -04	In discussions with several presents during the Jan. 30 Open House period when questions were asked about the Navy's tax-paid budget for 1) Giant full-color posters; 2) All-color wire bound booklets; and 3)Travel, menu and lodging expenses in Washington, Oregon, and California for their eight day excursion with 19 presenters and panelists.  The budget is a legitimate question which should have been raised during the hearing but wasn't. It will be raised at any upcoming hearing. If available, could our group be sent these budget figures as soon as possible?	This comment has been duly noted.
Mills C -05	Because others plan to critique the brochure topics of sonar, explosives at sea, drone overflights, anti-submarine devices, land demolitions, and project consequences for plant and animal life, I defer to their expert information. However, upon reading at some length in the EIS Executive Summary and finding that some ammunition planned might contain depleted uranium, this was seriously alarming. The possibility that this toxic element could enter the food chain and contaminate the ocean floor ranks high in my overall concerns about the Navy's current NWTRC EIS/OEIS plans.  Information about depleted uranium appearing in both scientific and mainstream media going back to the Vietnam War and forward to both Iraqi Wars have provided devastating evidence of damage and death to civilians, to our military and the lands involved.  Because depleted uranium has an indefinite "shelf life", some say 10,000 years, this issue along with many others included in the EIs makes it imperative for the Navy to do further research and make comprehensive revisions in its EIS before further hearings are scheduled.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Mills C -06	Harking back to the Jan. 30 hearing attendance, Navy public affairs agents say 40 signed in during the two-hour Open House. Evidently, for some reasons, many left before the hearing because a head count showed that he 19 Navy presenters probably outnumbered the 15 or 16 citizens who'd belatedly learned of the hearing and stayed for the entire slide presentation and for several to testify.  In Review-  1. The Navy failed in its NEPA requirements to notify the Oregon citizens of the Jan. 30 public hearing.  2. Consequently, the Jan. 30 hearing is invalid and the Feb. 18 public comment period is invalid  3. The Navy must do further research and make revisions in the EIS and at least three new public hearings should be scheduled with NEPA required notification compliance. And the public comment period should be extended to April 11.  Things to Do-  1. Please examine the attachments FedExed to you on 2/16/2009. They include articles and other materials blogged from Hawaii to Virginia which we understand resulted in comments sent from all	This comment has been duly noted.

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	over the country.	
	<ol> <li>Please go online and access newspaper coverage of the NWTRC EIS/OEIS proposals. In an effort to help inform Oregon citizens of the Navy proposal, our group contacted most of the newspapers listed below along with the Associated Press.</li> </ol>	
	The Portland Oregonian-Beginning with the Feb. 5 edition	
	The Newport News-Times- 2/4-2/11-2/13	
	The Lincoln City News-Guard-2/11	
	South Lincoln County News-2/11	
	Other widely-read papers including:	
	Salem Statesman Journal	
	Eugene Registrar Guard	
	Corvalis Gazette-Times	
	Coos Bay World	
	Conclusion	
	To Kimberly Kler, please understand that the criticisms presented here are not aimed at you or the facilities staff. Rather, these comments are addressed to our military policy makers.	
	What the Navy designers of the NWTRC plan did not realize in presenting this project is that it would fly in the face and consciousness of most Oregonians, especially coastal Oregonians.	
	Since 1859, our state has drawn free-spirits who love and respect the environment. People like William U'Ren who established the initiative and referendum ballot measure (1902); Gov. Oswald West who, by edict, made Oregon beaches public (1913); Bob Straub, . Dr. Bob Bacon and Gov. Tom McCall who engineered Oregon's famous Beach Bill (1962); and two women who successfully protected much of the central Oregon coast area Penelope Hull and Addaline Huff (1980s).	
	This proposal indicates to some that many in the Military establishment are living in a bubble disassociated from the rest of Americans desperately concerned about the economy and ecology. Disassociated by hiring contractors-not scientists- to author the EIS and relying on well-meaning but untrained communication workers to promote critical programs.	
	The founders understood this potential problem when they wrote:	
	"He (the King) has affected to render the Military independent of and superior to the Civil Power."	
	Declaration of Independence- July 4, 1776	
	This public comment is respectfully submitted by Charlotte Mills- A member of Citizens Opposed to Weaponizing the Oregon Coast.	
	[Transcribe letter from The News Guard here.]	

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Mills C -07	Contents attached here are media reports and other materials I want included in my Public Comment contributions.  Please be diligent in placing my comment to be sent 2/17/09 to the materials being FedExed to you today-2/16/09  [Media reports and additional information available in separate attachment]	All comments received have been included and considered for the Final EIS/OEIS.
Mills C -08	Materials being submitted here are being FedExed on March 10. A second public comment statement will be faxed to your office this evening on March 10. Please attached the coming comment statement to the materials you will received on March 11 via FedEx.	Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	[E-mails, newspaper clippings, and correspondence attached]	
	I faxed Sheila Murray yesterday March 22 requesting information about which newspapers received news releases about the six public hearings held in January and February and when. And I asked her to contact you about where the public hearing ads were placed and the dates and also where and when the two-volume EIS documents were sent.	The requested information is included in Appendix F of the Final EIS/OEIS. Opening boxes are the responsibility of the library, not the Navy.
	Later, I realized I should have rather made my request to probably you about the ad placements and the EIS delivery to the library repositories. It is my understanding that KATZ and Associates were hired by the Navy to perform both these services. If not you, could you please let me know who and please pass this request on to the appropriate person or department?	
	Our group is trying to be as accurate as possible in reporting to the Oregon citizens, our congressional delegation, and other interested parties how the public got informed about the six public hearings.	
Mills C -09	In our calls to newspaper editors that appeared in the Executive Summary and other misc. Navy related lists and to newspaper editors we knew of in the three Northwest Complex states near the hearing sites, here are the kind of responses we received:	
IVIIIIS C -09	<ol> <li>We didn't contact urban or out-of-range papers. Whidbey News-Times ran a story but not a Navy source (no date given). Other daily editors recall no release. Ads uncertain.</li> </ol>	
	<ol><li>Others reported they received no news release or an ad.</li></ol>	
	3. Others reported they may have received a story but it arrived too late for their weekly or bi-weekly publication deadline. So several didn't run the story at all or several ran the story one day before the hearing or one ran the story after the hearing. However, if the paper received an ad on time, the ad was run.	
	<ol> <li>Others received a story but determined the hearing was out of their circulation range and didn't run the story.</li> </ol>	
	In our calls to the Repository libraries, several reported they received the one volume EIS dated Sept. or Oct. 2007. Several reported they didn't receive the current EIS. The most disappointing response to our calls were from librarians who either had to look for the EIS in unopened boxes telling us because the delivery form contained no cover letter or notice that the	

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	volumes were time-related- that they had not cataloged or shelved it in their	
	reference sections; and from librarians who said because the box or document was labeled being a "Draft," they chose not to catalog and shelve	
	it.	
	So, Kimberly, if this is something you coordinated, would you please contact KATZ and Associates to provide our group an accounting of where and when the ads were placed and where and when the EISs were sent. Surely, KATZ had to bill and provide a statement to the Navy before they could be paid for these services.	
	As mentioned to Shelia, time is a factor in receiving this information. In order to make an accurate report to the rest of our group, to our community and impacted Oregon areas and to our congressional delegation, we want to make our report well-ahead of the April 13 extended comment date. Shelia knows how to get this back via e-mail.	
	On February 16,2009 I first submitted a public comment of three pages. Today a second comment is being submitted to comply with the March 11 comment period. A number of media stories and clippings are included along with other materials that have been generated since the first February 16 submissions. These items were FedExed today to the Silverdale headquarters. And I request for this comment to be attached to those FedExed materials tomorrow on March 11.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. Since the hearing was added (on short notice) by time we got details set, we regretfully had less time for notification.
	Please take notice of the February 22 and March 5 submissions addressed to Oregon's Congressional Delegation. Those documents report on the many issues that have come to light as the result of the Newport (Jan.30) and Tillamook (Feb.26) public hearings. If reviewed, these issues do not need to be addressed here again.	
	The new comments submitted here are both general and specific:	
Mills C -10	*The Navy has gone through the motions of conducting public hearings.  Because it has failed at both the Newport and Tillamook hearings to comply with NEPA regulations to provide "early notification" to the public and to the provide EIS copies to either location, both hearings were illegal and invalid.	
	*No rhyme or reason can be discerned in how or why the Navy or its hired Public Relations firm called KATZ determined where to send news releases, display ads or copies of the EIS.	
	Examples of newspaper notification-	
	Oak Harbor Whidbey News Times-Editor not aware that any notice or release arrived informing public about the Jan. 29 public hearing in Oak Harbor.	
	Port Townsend-The Jefferson County Leader- Has not yet returned calls	
	Port Hadlock- No paper found yet. Mentioned in EIS booklet as a "repository" site.	
	Bremerton Kitsap Sun- Editor can't recall receiving news item about the Oak Harbor hearing on Jan 27. Did do a story on Nov. 2008 but not about the public hearing.	
	Pacific Beach North Coast News- Left a message but no response yet.	

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	Hearing site Jan. 28	
	Gray's Harbor WA- Gray's Harbor is not a town as indicated on Navy booklet. No newspaper exists called Gray's Harbor. The hearing was held in the Gray's Harbor. The hearing was held in the Gray's Harbor College cafeteria in Aberdeen, WA. (Although the EIS was sent to Hoquiam)	
	The Aberdeen Daily World- Unfortunately, missed any response calls.	
	Newport News-Times-Editor denies receiving any notice of Jan. 30 hearing.	
	<u>Lincoln City News-Guard-</u> Listed in EIS Executive Summary to receive news notice. Editor reports no notice was ever received. Found on its own about Jan. 30 hearing. Did story Jan. 4, five days after Jan. 30 hearing.	
	Eureka Times Standard- Editor James Faulk says no notice was received about the Eureka hearing set for Feb.2. Regrets not being informed because that community is interested and active in marine environment issues. "Would have fulled an auditorium"	
	<u>Tillamook Headlight-Herald-</u> After Lincoln County citizens complained to Oregon's six Decmocratic Congressional Delegation. A second Oregon Public Hearing was scheduled for the Tillamook county Fairgrounds on Feb. 26. The Headlight- Herald is a weekly newspaper. The Navy Silverdale office notified the Herald of the Feb. 26 Tillamook public hearing on Feb. 20, too late for their 18 <sup>th</sup> weekly edition. So, the Herald dutifully did a story announcing the Feb. 26 hearings, in their weekly Feb. 25 <sup>th</sup> edition, one day before the 26 <sup>th</sup> hearing. Hardly an "early notification" required by NEPA regulations.	
	Examples of Katz P.R. Firm Providing Els to Community Libraries.  Oak Harbor Public Library- Reports that two-volume ElS arrived Dec. 2008 with no instructions of purpose. Because it was called a "Draft", it was never catalogued or shelved. Public had no opportunity to examine or review ElS in order to ask informed question at Oak Harbor Jan. 27 public hearing.  Port Townsend Public Library-Listed in ElS booklet as a "repository site" reports that it received a one-volume ElS copy dated Sept. 2007. Called a "Draft", it was catalogued Oct. 2007. Staff noting it as a "Scoping" publication but reporting no news notices was received in 2008 or 2009 announcing the Oak Harbor public hearing set for Jan.27.'	Navy apologizes for the error in putting "Newport" on the letter with the Tillomook copy which caused the library to redirect it to Newport. Note that the DEIS was also available on the website, and those interested could have requested a copy as well.
Mills C -11	Port Hadlock-Jefferson County Rural Library- Listed in the EIS booklet where a "repository" copy of an 2008 EIS two-volume copy would be available, no response yet to our inquiries.	
	Bremerton Kitsap Regional Library- Reports it has one-volume of EIS dated Sept. 2007 called a "Draft" for a 2007 Scoping meeting. Is located in their Sylvan Way Branch. But no 2008 or 2009 EIS two-volume copy has been received relating to the Oak Harbor Jan.27 hearing or any other hearing.	
	Haquiam Timberland Regional Library- Listed in EIS booklet where public could find a "repository" copy of the EIS to learn about the Jan. 29 hearing scheduled for a Gray's Harbor site-but actually scheduled for Gray's Harbor College cafeteria in Aberdeen, WA. This library has a two-volume EIS which	

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	arrived Dec. 2008. It's uncertain if it has yet to be cataloged. Librarian says because it may be called a "draft" with no instructions of purpose or time-relatedness may be the reason it still remains uncataloged	
	Lincoln City Public Library- Staff reports that his library did received a two-volume boxed EIS document some weeks before the Newport Public Hearing at the Hatfield Marine Science Center scheduled for Jan. 30. After citizen inquiry, librarian finds two-volume EIs still boxed with no cover letter information about its purpose or time relatedness. So on Feb 13., 15 days after the Jan 30 public hearing in Newport, this EIS was cataloged and shelved.	
	Eureka Humboldt County LibraryLibrarian Steven Sottong says he is unaware that his library has ever received a copy of the current EIS. As the Eureka newspaper editor remarked, Sottong says this community is an active community of environmental groups and individuals who want to know why they weren't informed a bout a public hearing and the ability to review the EIS.	
	Tillamook County Public Library- Perhaps the most bizarre happening. Evidently, the KATZ P.R. firm in charge of sending the two-volume copy of the EIS to libraries did send the EIS to the Tillamook county Library address sometime before a second public Oregon hearing was scheduled for Fe.26 in Tillamook. However, while it was sent to the Tillamook library address, it was directed to the Newport Public Library. So the librarian dutifully reboxed and sent this EIS to the Newport library days before the Feb. 26 Tillamook public hearing. Consequently, Newport now has two EIS copies and Tillamook no copy. So citizens in the Tillamook area had no EIS to review for the feb. 26 hearing in order to ask informed questions. Yet another failure of the Navy to comply with the NEPA requirements to provide the public with an EIS to examine and review prior to a public hearing.	
Mills C -12	Because of the Navy's highhanded procedures in designing, informing, and conducting six public hearings, it further violates the constitutional basis of the military being governed by civilian authority. Left unchallenged, the nation risks the development of an imperial military.	This comment has been duly noted.
Mills C -13	None of the Evaluation Alternatives offered in the Public hearing booklet are agreeable. Group members differ on the options offered. But all agree that choice of options should be withheld until the Navy provides answers to the questions asked at the Newport hearing but not answered by panelists. Questions about installations and activities, according to the EIS Executive Summary, that already exist and are being conducted on land, shore land, and offshore in Oregon's ocean waters.	The alternatives considered in this EIS/OEIS meet all NEPA requirements. NEPA implementing regulations provide guidance on the consideration of alternatives in an EIS. These regulations require the decision maker to consider the environmental effects of the Proposed Action and a range of alternatives to the Proposed Action (40 C.F.R. § 1502.14). The range of alternatives includes reasonable alternatives, which must be rigorously and objectively explored, as well as other alternatives that are eliminated from detailed study. To be "reasonable," an alternative must meet the stated purpose of and need for the Proposed Action.
Mills C -14	The term "No Action Alternative" is misleading. Because a good number of installations already exist and a number of ongoing activities exist, the "No Action" option really means these existing installations and activities will not	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect

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	be increased or extended-maybe.	a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).
Mills C -15	The California offices of the Natural Resource Defense Council (NRDC) settled a \$5 million lawsuit vs the Navy December 2008 on compliance issues similar to ones being raised here. Surely the Navy will not want to provoke another expensive, NEPA noncompliance lawsuit by failing to address the similar and substantive issues being raised by Washington, Oregon and California respondents.  The Washington, Oregon, and California public within the Northwest Training Range Complex have been handed a patchwork puzzle about what the Navy is actually proposing. Rather than protecting the nation, the Navy appears to be trying to maintain an unchallengeable, "hands off" power position periodically imposed on the country and to maintain an undisclosed and unfettered military budget-by "going through the motions" of complying with their federal NEPA mandate but, in fact, curtailing their efforts to inform the public.  Citizens are dealing with a cautionary tale: To confront now or later on political and paramount issues which will eventually become unpopular and challenged sometime in the near future. Do we challenge the lives and resources that could be sacrificed now or wait to later? At this point, within our citizen group, some believe the Navy's public hearing procedure have shown "poor performance" and others believe procedures have been calculated to deceive and have shown "gross incompetence" to inform.  Our group reports that most Navy contract staff and presenters have been polite and pleasant, although their jobs performance has been mixed and puzzling. After talking to a number of parties in Washington and California, it	This comment has been duly noted.
	appears that job performance in both those states is similar to was observed in Oregon.  Our group's concern is that the responsibility for the poor planning, the inscrutable EIS delivery strategy to library "repositories" and the mixed up performance of providing timely notification to the public through news	
	releases in order to comply with NEPA requirements-docs not belong to the staff and contractors but to the Navy's upper echelon of policy-makers.	
Mills C -16	Final Recommendations- Dismiss both Oregon public hearings for failure to comply with NEPA requirements making both events illegal and invalid.	The Navy's entire public involvement process during the development of this EIS/OEIS has met all NEPA requirements.
Mills C -17	Start the public hearing process all over again. Reschedule three public hearings in Oregon, Washington, and perhaps California (if requested). All sites are to receive "early notification" buy the Navy providing the news media along all of the coastal impacted areas with thorough information about their proposals. And the Navy needs to assume the task or enlist competent contractors to get copies of the EIS to designated libraries significantly earlier than the scheduled hearings. A note on the library door isn't adequate. News releases to all media about the EIS and its location is mandatory.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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Mills C -18	Hire independent marine scientists to correct and revise the EIS by updating its embarrassingly inadequate and inaccurate content. The Navy faces a coastal public who are well-informed and zealous about protecting the source of their livelihoods and the environment where they have chosen to live their lives.	The Navy feels the Draft EIS/OEIS was a very thorough analysis of impacts that could result from the proposed activities.
	Make the changes in conduct and revisions recommended here in all the 13 Navy Training Range Complexes we understand are simultaneously undergoing the same efforts to impose the unscientific and deceptive procedures currently being challenged here in Oregon.  One Last Important Message	This comment has been duly noted.
Mills C -19	At every get together, members of our group re-emphasize that they sincerely respect and honor all Navy Men and women. And that they understand the Navy has important training responsibilities. They, however, believe the inadequate way the public has been informed and the outdated science found in the EIS needs to be addressed before the current Navy proposals can be supported.	
	Please find faxed here April 10 my public comment addressing the NW Complex proposals being considered for evaluation and adoption during this year of 2009.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	Members of Citizens Opposed to Weaponizing Oregon Coast stipulate to the Navy that the 2009 Public Hearing Process failed to comply with NEPA requirements. Attached papers of our detailed research demonstrate the Navy failed: 1) To notify the coastal community newspapers and the public with "early notification" of the January and February public hearings; and 2) To adequately provide copies of the December 2008, two-volume EIS to the original seven library repositories and the two extra repositories at Tillamook County Library and the Eureka Humbolt County Library.	The Navy's entire public involvement process during the development of this EIS/OEIS has met all NEPA requirements.
Mills C -20	Therefore, our group further stipulates that because the Navy failed to comply with the above NEPA requirements, that the 2009 Public Hearing Procedures are invalid and illegal.	
Willis O 20	Our group recommends that the Navy confer with Secretary of Navy Donald Winter and NOAA Director Jane Lubchenco to:	
	<ul> <li>Reschedule the Public Hearing process after engaging competent contractors to notify the news media and deliver a revised EIS to repositories in a timely way.</li> </ul>	
	<ul> <li>Recruit independent marine scientists to evaluate the merit of the current EIS.</li> </ul>	
	<ul> <li>Hire independent marine scientists to revise, correct and update the old and faulty research in the current EIS.</li> </ul>	
	- Then, and only then, start the Public Hearing process over again.	
	Shockingly low attendance at both the 2007 Scoping Meetings (total of 84) and at the 2009 Public Hearings (total of 103) demonstrated how poorly the public received "early notification" and how unavailable copies of the December 2008 EIS Draft were for the public to examine. At four out of the	

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	five 2007 and 2009 events, the Navy's 19 panelists and presenters	
	outnumbered the citizens who attended.  Other numbers of our group are providing public comment addressing	
	technical topics on sonar, chemical toxins, baseline activities and the	
	economic consequences that would result from the current activities	
	proposed.	
	The one and only subject of this public comment is the Legality of the Northwest Complex's Procedures. In the attached pages the facts address these issues: 1) The news media located in the coastal communities most	
	impacted by the Navy's plans were not legally notified; and 2) The contracted	
	KATZ P. R. firm failed to deliver some copies of the EIS to repositories, delivered the 2007 one-volume EIS to two repositories and mixed up delivery between two repositories.	
	The result was that the NEPA requirements for the Navy to provide a "detailed public (EIS) document" to repositories and to provide the public with "early notification" of public meetings – failed.	
	For these reasons, our group makes the stipulation that the 2009 Public Hearing Procedures are invalid and illegal.	
	Our group's stipulations and concerns are being sent to our Oregon Congressional Delegations this week.	
	[Attachment A – NEPA Process fact sheet provided by the Navy on the website and at all public meetings]	
	[Attachment B – Section 102 (42 USC § 4332) National Environmental Policy Act, highlighting paragraphs (C) (i) and (D) (iv) of the law]	
	[Attachment C – Listing of Washington, Oregon, and California newspapers that were and were not notified about the public hearings.]	
	[Attachment C – Separate comment from Eva Bostnick and David Parrish, addressed as a separate comment under the name "Bostnick."]	
Mills J-01	The majority of the activities are in international waters. What are the requirements for consultation with international organizations? Do international organizations such as the International Whaling Commission concur with the analysis in the EIS/OEIS?	This EIS/OEIS has been prepared in accordance with Executive Order 12114 as implemented by 32 Code of Federal Regulations (CFR) 187, which requires environmental consideration for action that may affect the environment outside of U.S. Territorial Waters on the high seas. There are no requirements for the Navy to consult with the International Whaling Commission (IWC) although the IWC, and all other organizations, are welcome to provide input via comments on the Draft EIS/OEIS.
Mineral	The U.S. Minerals Management Service (MMS), Pacific Outer Continental Shelf Region (POCSR) has reviewed the Northwest Training Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement (NWTRC EISIOEIS) and submits the following general comment.	This comment has been duly noted.
Management Service (MMS)-01	The NWTRC encompasses offshore areas that have known oil and gas resources and subsea hydrates and renewable energy resources that could be developed to meet our Nation's future energy needs. Although there are no plans to move forward with leasing, exploration and development activities at this time, high energy prices may stimulate interest in developing these	

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	resources in the future. Offshore California, the military and the oil and gas industry have been sharing use of the Point Mugu Sea Range for more than 30 years. These operations have been able to successfully co-exist due, in large part, to the effective policies and procedures the MMS and the military have jointly implemented to minimize the potential for space use conflicts in military warning areas. In the event future energy development projects are proposed on the Federal offshore lands within the NWTRC, the MMS is looking forward to working with the U.S. Navy, U.S. Air Force and other defense organizations to build on the positive working relationships we have already established.	
	Thank you for the opportunity to comment on the NWTRC EISIOEIS. We look forward to working with the Navy on issues of mutual concern in the future. Please contact Mark Eckenrode of my staff at (805) 389-7827 or at Mark.Eclrenrode@mms.gov if you have any questions regarding these comments.	
Morris-01	It is unconscionable in the 21st ,century, for the Navy to think that it has the right against monumental public outcry to continue to seriously endanger many cetacean species inhabiting the world's oceans. The Navy has no right to harass, injure, or kill thousands of whales and dolphins along the Oregon Coast and other critical places in the world's oceans. The Navy does not have the right to further destroy ocean habitat by these war-training maneuvers utilizing spent uranium and titanium materials and dropping bombs.  Regarding mid-frequency active sonar—without essential safeguards—this is known to cause disorientation, hearing loss, stranding and death in whales and dolphins. This is only one assault proposed on the marine mammals of the oceans.  The entire west coast, including the Oregon coast is in many places a marine sanctuary, including migratory routes for the gray whale. Whale watching, fishing are active industries on the Oregon coast and elsewhere on the west coast. This should have priority over the Navy's need to practice sonar at the risk of destroying these industries and disrupting irreparably the migratory routes of cetacean species such as the gray whale.  The Navy does NOT need to put marine mammals or our ocean habitats at risk in order to protect the American people. The horrific attack on the World Trade Center on 9/11/01 only shows that trying to just rely on high tech means for protection leaves us all very unprotected. The Navy can take common sense precautions, such as avoiding whale calving grounds, migration corridors, and critical habitat; thus safeguarding all cetacean species along the Oregon Coast and elsewhere now and in the future.	The Draft EIS/OEIS analyzed the potential impacts of conducting required Navy training throughout the range complex, including the areas described in the comment. The purpose of this analysis is to ensure the Navy makes an informed decision on future training levels. Please see Chapter 3 of the Draft EIS/OEIS for the complete analysis of the potential impacts.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Morris-02	Further the comment period is hardly sufficient given that the Navy's principal mechanism for public information and input about the EIS, their website: (www.nwtrangecomplexeis.com/EIS.aspx), was seriously compromised between the Dec. 29, 08 inception of the EIS Public Response Period and Jan. 21. Attempts to make comments via the website were 'not allowed due to "abort issue" (Navy's term) from Dec 29 until Jan. 20. The website was not	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the

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	accessible whatsoever between Jan 15 and Jan 21. This represents a breach of process established by the Navy itself.  Finally why does the Navy continually think that it is OK to seriously jeopardize ocean habitats and that this will not, for some strange reason, jeopardize the health of our country, its people, ocean life and other habitats throughout the oceans of this world? It is time to stop escalating a wartime mentality and start saving our oceans and the biosphere we all share.	original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Nagle-01	I am extremely opposed to Naval Detonation and Sonar testing in our Northwest oceans. These kinds of tests have already been proven destructive to marine mammals and other ocean life. It is now time to protect our oceans. Without a healthy ocean we will not be able to live on this planet. No testing, detonating or polluting our oceans!	The full analysis of potential effects of the Navy's proposed activities to marine life is found throughout Chapter 3 of the Draft EIS/OEIS.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Natural Resources Defense Council (NRDC)-01	On behalf of the Natural Resources Defense Council ("NRDC") and our 1.2 million members and activists, I am writing to petition the Navy of an extension of the public comment period on its Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the Northwest Training Range Complex; ("NWTRC DEIS").  Notice of the comment period was published in the federal Register on December 30,2008. See 73 Fed. Reg. 79856. The public has been given 44 days to submit comments by February 11, 2008 on over 1000 pages of dense information. While 44 days is hardly enough time to digest and compose comments on the Navy's extensive plans, the public's opportunity to comment has been frustrated by numerous problems with the NWTRC DEIS website and electronic comment portal. We have received numerous reports that individuals have been unable to submit comments and/or unable to access information on the Navy's NWTRC DEIS website. I understand that the website itself was inoperable for at least 6 days and that the Navy was aware of the problem. In light of these difficulties, the dense information provided by the Navy in justifying its plans and the extensive range of activity proposed, we respectfully request an extension to submit written comments of at least 30 days.  Such an extension is necessary to fully protect the public interest by giving citizens the time to thoroughly analyze the Navy's proposal and submit Comments on the critical issues raised therein. The Navy's NWTRC OEIS raises many issues that the public has never been able to address before. Notably, some of the Navy's activities take place in critical habitat for Southern Resident killer whales and extend into the Olympic National Marine Sanctuary, affecting migration routes for gray and humpback whales as well as many other species. The public as well as the scientific community, needs sufficient time to identify, analyze, and comment on range activities and on	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	the Navy's analysis thereof.  Because of the size of the NWTRC DEIS the many issues it raises, as well as the difficulties the public has faced in obtaining information and commenting thereon, we believe that an extension is warranted here. Therefore, we strongly urge you to grant this petition and extend the comment period. As always, we would welcome discussion with the Navy at any time.	
NRDC-02	At the outset we must note that this public comment period has been rife with problems. Initially given less than 45 days, the public's opportunity to comment was frustrated by numerous problems with the Navy's website, electronic comment portal and notice of public hearings. We received several reports from individuals who were unable to submit comments, unable to access information on the Navy's website and/or unaware of public hearings. The website itself was inoperable for much of the comment period, further impeding the public's ability to comment. In light of these difficulties and of the extensive range of activity proposed, NRDC requested an extension of the public comment period. In addition, the Congressional delegation from Oregon requested an extension of the public comment period until April 11, 2009 as well as additional hearings in Oregon. We commend the Navy for extending the public comment period until March 11, 2009 and adding a public hearing in Tillamook, Oregon, but also recognize that many people particularly in Oregon - continue to be dissatisfied with the Navy's failure to provide additional hearings and adequate notification.	Please see response to NRDC-01.
NRDC-03	In addition, the DEIS makes repeated reference to a Biological Evaluation ("BE") that the Navy prepared to catalog the effects of its proposed alternatives on species listed as threatened or endangered under the Endangered Species Act. The BE was not included in the CD version of the DEIS and does not appear to be available on the Navy's website. As we discuss in more detail below, the potential effects of each of the alternatives on sensitive and listed species are one of the primary concerns associated with this proposal. The omission of the BE has severely curtailed the public's ability to meaningfully evaluate and comment upon the effects of the alternatives. We urge the Navy to publish the referenced biological assessment and extend the comment period to accept additional public comment on this key document.	The NEPA requirements were met in the EIS/OEIS. The analysis contained within the Draft EIS/OEIS was complete and fully supported the conclusions. The Biological Evaluation provides information that is specific to the requirements of the regulatory agencies for which it was written.  The BE is not completed yet. Upon completion of consultations and issuance of the Biological Opinions by NMFS and USFWS, the Biological Evaluation will be made available to the public.
NRDC-04	We must also object to the Navy's piecemealing of expansion projects in the Pacific Northwest. On July 31, 2007, the U.S. Navy announced its intent to prepare an Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for expansion of its Northwest Training Range Complex. See 72 Fed. Reg. 41712 (July 31, 2007). Several of the undersigned organizations, including NRDC, objected to the Navy's attempt to improperly segment the NWTRC DEIS and the proposed NAVSEA NUVVC Keyport Range Complex Extension project (73 Fed. Reg. 53002 (Sept. 12,2008)) which includes extending the Keyport Range, the Dabob Bay Range Complex, and the Quinault Underwater Tracking Range - because these projects are connected to one another both geographically and operationally. The National Environmental Policy Act, 42 U.S.C. 4321 et	We disagree. The two actions, although overlapping, involve very different activities, Fleet training on the NWTRC and RDT&E on the NAVSEA NUWC Keyport Range Complex, respectively. Neither action depends on the other. The Navy is ensuring NEPA and EO 12114 compliance for both actions. NUWC Keyport activities are evaluated in the cumulative impacts section of the NWTRC EIS/OEIS.

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	seq., prohibits the Navy from segmenting these types of connected actions in different analyses and requires consideration of the impacts of such connected actions together in one EIS that comprehensively considers environmental effects. 40 C.F.R. § 1508.25(a)(I) (ii), (iii), id. § 1502.4(a).	
	The proposed increase in training activities within the NWTRC include intensive, year-round exercises employing active sonar as well as a battery of other acoustic sources and explosives detonations. Over 122,440 square nautical miles, the range engulfs the waters off Washington, Oregon and northern California. The Navy's preferred alternative would dramatically increase the amount of training in the NWTRC, including "range enhancements" such as the development of an underwater training minefield, Portable Undersea Tracking Range, and air and surface target services.	
	The Navy's envisioned NWTRC expansion would pose significant risk to whales, fish, and other wildlife that depend on sound for breeding, feeding, navigating, and avoiding predators-in short, for their survival. Many of the exercises proposed would employ mid-frequency active sonar, which has been implicated in mass injuries and mortalities of whales around the globe. The same technology is known to affect marine mammals in countless other ways, inducing panic responses, displacing animals, and disrupting crucial behavior such as foraging. The NWTRC expansion would also affect fisheries and essential fish habitat, damage hard-bottom habitat, and release a variety of hazardous materials - such as thousands of rounds of spent ammunition and unexploded ordnance containing chromium, chromium compounds, depleted uranium and other hazardous materials - into coastal waters.	
NRDC-05	The National Environmental Policy Act requires the Navy to employ rigorous standards of environmental review, including a full explanation of potential impacts, a comprehensive analysis of all reasonable alternatives, a fair and objective accounting of cumulative impacts, and a thorough description of measures to mitigate harm. Unfortunately, the DEIS released by the Navy falls far short of these standards.	The Navy's statement of the purpose and need for the proposed action is detailed and specific, the scope of the proposed action is described in exhaustive detail after careful assessment of training and RDT&E requirements, and the development of alternatives has been conducted according to the highest standards and requirements of NEPA. The EIS/OEIS is the product of extensive analysis applying best available science, including methodologies for analyzing impacts of MFA sonar on marine mammals that were developed in close consultation with NMFS. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any unavoidable impacts of the proposed action. The Navy has further conducted an appropriate analysis of cumulative effects of its proposed action.
NRDC-06	The Navy's DEIS does not properly analyze the environmental impacts of the limited alternatives it has proposed. Its analysis also substantially understates the potential effects of sonar on marine wildlife. For instance, the Navy fails to acknowledge risks posed to a wide range of marine species - including highly endangered Southern Resident killer whales and other marine mammals - and impacts to the Olympic Coast National Marine Sanctuary from the activities listed above, or from actions necessary to support the proposed increase in training, such as increased risk of oil spills.  Further, it concludes that only one harbor seal would suffer serious injury or	Reponses to this issue are addressed in subsequent specific comments.

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	die during the many hours of proposed sonar training. The Navy reaches this conclusion by excluding relevant information adverse to its interests, using approaches and methods that are unacceptable to the scientific community and ignoring entire categories of impacts. As discussed in detail in Appendix C and the attached critique by Dr. David Bain, the Navy's assessment of acoustic impacts is highly problematic.	
NRDC-07	Moreover, the Navy's analysis entirely fails to account for cumulative impacts for the years of anticipated activity. The Navy merely recites a list of potential impacts without actually taking the next step of analyzing the effects of those impacts. The Navy's repeated platitude that any impacts are short-term in nature and thus would not combine to produce cumulative effects not only lacks scientific validity, but also grossly misapprehends the definition of cumulative impacts under NEPA. 40 C.F.R. § 1508.7.	The entire Draft EIS/OEIS provides the cumulative impacts analysis, not just Chapter 4. Chapter 3, in particular, provides the past and present impacts and environmental conditions that represent the baseline, and Chapter 3 also discusses the consequences or potential future impacts from Navy activities. Chapter 4, then, discusses the other reasonably foreseeable activities to the extent they are known and the incremental impact of the Navy's proposal when added to past, present, and future impacts.
NRDC-08	The failure to meaningfully assess these kinds of risks also necessarily infects the Navy's proposed mitigation measures and alternatives. The Navy fails to consider a variety of other options, alternatives, and common-sense mitigation measures – some employed by the Navy itself in previous training - that would reduce the impacts. What the Navy presents instead is an alternatives analysis and mitigation strategy so narrowly defined that it effectively disregards the environment.  The Navy can, and must, adopt meaningful measures to reduce the harmful impacts of sonar, including spatial and temporal restrictions for its training exercises. As described in detail in Appendix A and Section IV below, these measures should, at a minimum, include protecting the following areas:  • All inshore waters of Greater Puget Sound (including the Strait of Juan de Fuca and Strait of Georgia)  • Lower Continental Slope waters between 500 and 2,000 meter depth contours  • Outer coastal waters between the shoreline and the 100 meter depth contour  • Certain canyons and banks off Northern Washington State and Oregon  • The Olympic Coast National Marine Sanctuary  In sum, we urge the Navy to revise its impacts analysis consistent with federal law and to produce a mitigation plan - which includes protected areas - that truly maximizes environmental protection given the Navy's actual operational needs. We also urge the Navy to make available to the public the data and modeling on which its analysis is based.	There is no sonar training conducted within the inshore waters of the Puget Sound or in the Olympic Coast National Marine Sanctuary. However, the US Navy in conjunction with NMFS and USFWS is best suited to determine what mitigation it can effectively use during its training and testing activities to mitigate harm to marine mammals while still being able to meet its operational needs to train for real-world conditions it may face. The Navy's mitigation scheme is more than just visual monitoring. Aerials and sonar power-down protocols are used as well. Chapter 5 presents the US Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. Navy does not expect 100% of the animals present in the vicinity of training events will be detected and the acoustic impact modeling quantification is not reduced as a result of mitigation effectiveness. During a recent major exercise in Hawaii (RIMPAC 2006), a mitigation measure that precluded ASW training in the littoral region (within 12 nm from shore or to the 200 meter isobath), had a significant impact on realism and training effectiveness. There is no scientific evidence that any set distance from the coast is more protective of marine mammals than any other distance. The Navy has also determined that limiting MFA sonar use to outside 12 nm from the coast prevented crew members from gaining critical experience in training in shallow and littoral waters where sound propagates differently than in deep water.
NRDC-09	I. <u>Legal Framework: The National Environmental Policy Act</u> The National Environmental Policy Act of 1969 ("NEPA") "declares a broad national commitment to protecting and promoting environmental quality." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). NEPA establishes a national policy to "encourage productive and enjoyable harmony between man and his environment" and "promote efforts which will	As explained above, the Navy's statement of the purpose and need for the proposed action is detailed and specific, the scope of the proposed action is described in exhaustive detail after careful assessment of training and RDT&E requirements, and the development of alternatives has been conducted according to the highest standards and requirements of NEPA. The EIS/OEIS is the product of extensive analysis applying

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prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 42 U.S.C. § 4321. In order to achieve its broad goals, NEPA mandates that "to the fullest extent possible" the "policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with [it]." 42 U.S.C. § 4332. To that end, NEPA requires that the potential environmental impacts of any "major Federal actions significantly affecting the quality of the human environment" be considered through the preparation of an environmental impact statement ("EIS"). Robertson, 490 U.S. at 348; 42 U.S.C. § 4332. This directive is known as a "set of action-forcing procedures" that require decision makers to take "a 'hard look' at environmental consequences." Robertson, 490 U.S. at 349 (quoting Kleppe v. Sierra Club, 427 U.S. 390,410, n.21 (1976)).

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Central to NEPA is its requirement that, before any federal action that "may significantly degrade some human environmental factor" can be undertaken. agencies must prepare an EIS. Steamboaters v. F.E.R.C., 759 F.2d 1382, 1392 (9th Cir. 1985) (emphasis in original). The requirement to prepare an EIS "serves NEPA's action-forcing purpose in two important respects." Robertson, 490 U.S. at 349. First, "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts[,]" and second, "the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation-of that decision." Id. (emphasis added). As tht: Supreme Court explained: "NEPA's instruction that all federal agencies comply with the impact statement requirement... 'to the fullest extent possible' [cit. omit.] is neither accidental nor hyperbolic. Rather the phrase is a deliberate command that the duty NEPA imposes upon the agencies to consider environmental factors not be shunted aside in the bureaucratic shuffle." Flint Ridge Development Co. v. Scenic Rivers Ass 'n, 426 U.S. 776, 787 (1976).

The fundamental purpose of an EIS is to force the decision-maker to take a "hard look" at a particular action - at the agency's need for it, at the environmental consequences it will have, and at more environmentally benign alternatives that may substitute for it before the decision to proceed is made. 40 C.F.R. §§ 1500.1(b), 1502.1; *Baltimore Gas & Electric v. NRDC*, 462 U.S. 87,97 (1983). This "hard look" requires agencies to obtain high quality information and accurate scientific analysis. 40 C.F.R. § 1500.1(b). "General statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." *Klamath-Siskiyou Wilderness Center v. Bureau of Land Management*, 387 F.3d 989, 994 (9th Cir. 2004) (*quoting Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998)). The law is clear that the EIS must be a pre-decisional, objective, rigorous, and neutral document, not a work of advocacy to justify an outcome that has been foreordained.

In nearly every respect, the Navy's DEIS fails to meet the high standards of rigor and objectivity required under NEPA.

best available science, including methodologies for analyzing impacts of MFA sonar on marine mammals that were developed in close consultation with NMFS. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any unavoidable impacts of the proposed action. The Navy has further conducted an appropriate analysis of cumulative effects of its proposed action. The EIS / OEIS inarguably takes a "hard look" at potential environmental consequences of the proposed action and alternatives, and provides sufficient information for careful agency decision-making.

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NRDC-10	II. The Navy Fails to Properly Analyze Impacts on Marine Mammals  As set forth in further detail in Appendix A, a thorough review of the region's marine mammals and habitat indicates that the Navy's impacts analysis underestimates actual impacts on species. The Navy's analysis of marine mammal distribution, habitat abundance, population structure and ecology also contains false, misleading or outdated assumptions that impede consideration of reasonable alternatives and mitigation measures.	The Draft EIS/OEIS used the most current, relevant scientific information, in many cases in coordination with the National Marine Fisheries Service, to develop the analysis on sonar training and potential impacts to marine mammals. The analysis is very thorough and complete in this regard.  The Navy feels the estimated "takes" (found on Table 3.9-12 of the Draft EIS/OEIS) are overestimates for numerous reasons, three of which are described below:
	consideration of reasonable alternatives and mitigation measures.	Where a range of density estimates existed, or where densities were seasonal, the modeling considered only the greatest density. This assumption leads to more animals within a sonar's range, and therefore more takes.      The modeling estimates do not consider the positive impacts of the
		Navy's mitigation measures. In reality, many of the estimated takes (primarily PTS and TTS) would be eliminated due to power down procedures in place as a marine mammal approaches a sonar source.  3) All surface ship sonars are modeled as the more powerful SQS-53C, when it may be a solution of all surface ship sonars are modeled.
		when in reality, 60% of all surface ship sonar hours proposed are significantly less powerful (225 dB compared to 235 dB of the SQS-53C).
NRDC-11	A. Impacts on Wildlife in the Olympic Coast National Marine Sanctuary The NWTRC almost completely engulfs the Olympic Coast National Marine Sanctuary ("NMS"), a region of extraordinary biological diversity. Twenty-nine species of marine mammals occur in the Olympic Coast NMS, including eight threatened or endangered species of whales, otters and pinnipeds. The sanctuary provides important regular foraging habitat for humpback and killer whales, including the endangered Southern Resident killer whale population (see below). Gray whales use the sanctuary during biannual migrations between calving and feeding areas, and a small, possibly distinct, group of gray whales known as "summer residents" use the area for feeding every summer. Additional cetacean species that have been observed in the waters of the sanctuary include: minke whales, fin whales, sei whales, sperm and pygmy sperm whales, blue whales, Hubb's beaked whales, Cuvier's beaked whales, Baird's beaked whales, Stejneger's beaked whales, Risso's dolphins, false killer whales, common dolphins, northern right whale dolphins, Pacific white-sided dolphins, Dall's porpoises, and harbor porpoises. Sea otters and pinnipeds such as Steller and California sea lions, harbor seals and elephant seals use near-shore areas within the sanctuary, haul out on land at a number of locations along the coast, and use deeper waters for foraging. A recent NOAA report specifically identified both military activities and	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).  Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."  (i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:  (A) Hull integrity tests and other deep water tests;  (B) Live firing of guns, missiles, torpedoes, and chaff;  (C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and
	underwater noise pollution as two of several emerging threats to the Olympic Coast NMS. <sup>3</sup> The report recognizes that noise pollution has the potential to compromise habitat quality for the marine mammals, fish and other wildlife that inhabit the sanctuary. In particular, it finds that "an increase in Navy activity or areas of operation, if not properly controlled, could have potential to disturb the seabed, introduce pollutants associated with test systems, and produce sound energy that could negatively alter the acoustic environment within the sanctuary." Indeed, there is a long history of incompatibility	(D) Anti-submarine warfare operations.

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	between increased naval exercises in the Olympic Coast NMS and preservation of the unique characteristics and species that led to its designation. In the mid-1990's, the Navy finally ended its bombing exercises at Sea Lion Rock after a protracted battle with wildlife advocates. The DEIS does not recognize that episode, nor does it include any specific mitigation measures or details about the Navy's planned operations within the sanctuary that would prevent a similar situation from developing in the future.	
NRDC-12	In addition to marine mammals, the Olympic Coast NMS includes habitat for abundant fish and invertebrate species, including many commercially important fish and shellfish. Thirty species of rockfish (including 13 species of concern in Washington state), as well as Pacific halibut, herring, Pacific cod, Pacific whiting, lingcod, sablefish, Dungeness crab, razor clams, and five species of Pacific salmon (Chinook, sockeye, pink, chum and coho) inhabit sanctuary waters. Threatened species in the sanctuary include the Olympic Coast populations of Ozette sockeye salmon and bull trout. Unique assemblages of cold-water corals and sponges, including gorgonians, stony corals and giant cup corals, have been found in the deeper waters of the sanctuary.  Despite the abundance of marine mammals, fish and invertebrates, as well as habitat for those species, the DEIS dismisses or improperly minimizes any significant risk to fish and wildlife in this area. At a minimum, the Navy must provide a detailed analysis of the impacts on marine species in the Olympic Coast NMS.	The discussion of fish in the Draft EIS/OEIS provides an overview of the predominant fish species and types of habitat known to occur in the NTWRC. Fish are categorized as: salmonids; coastal pelagic and forage; groundfish; and highly migratory species. Habitat is categorized as nearshore, offshore, and Puget Sound. The EIS follows this description with information regarding Essential Fish Habitat (along with the associated species) throughout the NWTRC. The analysis in the EIS is divided by indentifying potential impacts of activities on the species themselves, then follows with a thorough analysis of the potential impacts to Essential Fish Habitat.
NRDC-13	Further, given the federally protected status of the Sanctuary and its importance to a host of endangered and threatened fish and wildlife, the Navy should prepare and evaluate an alternative that excludes the Olympic Coast NMS from training exercises.	Please see response to NRDC-11. There is no evidence to indicate that the Navy's proposed activities would harm any of the species resident in the OCNMS.
NRDC-14	B. Impacts on Southern Resident Killer Whales The NWTRC overlaps with critical habitat designated for Southern Resident killer whales in Puget Sound, as well as those coastal waters vital to the whales' survival and recovery that were improperly excluded from NMFS' critical habitat designation. This population, which is recognized as a Distinct Population Segment and protected under the Endangered Species Act, declined by nearly 20% between 1996 and 2001. The Southern Residents remain at high risk. Since they were listed as endangered, the population has declined further to a mere 87 individuals in 2007 and recent reports are that another 7 whales died in 2008. <sup>6</sup> Several anthropogenic factors have been implicated in the decline, including high contaminant loads of PCBs, PBDEs and other toxics detected in blubber samples; declining prey availability as salmon (the whales' primary food source) have been decimated by freshwater habitat destruction, harmful hatchery practices, and historically poor harvest management; effects from vessels; and noise pollution. <sup>7</sup> NMFS recognizes acoustic effects and oil spills as among the principle potential threats facing this population, and in its Final Recovery Plan proposed to "continue agency coordination and use of existing ESA and MMPA	The Navy disagrees with the comment's assertion that the Draft EIS/OEIS dismisses impacts of sonar to the killer whale community and their salmonid prey. The DEIS addresses mid and high frequency sonar sources and presents the limited information with regards to physical and behavioral responses of fish to such sounds and levels. The analysis utilizing the limited information currently available suggests that populations of fish are unlikely to be affected by the projected rates and areas of use of military sonar.  The DEIS presents potential impacts from military sonar to the marine mammals expected to be present in the NWTRC. However, all sonar activities are performed offshore of the Washington, Oregon, and California coasts in the PACNW OPAREA. As such, the impacts to the Southern resident Killer Whale population from military sonar are minimal, occurring only while the population is outside of Puget Sound in the Offshore Area of the NWTRC.

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	mechanisms to minimize potential impacts from anthropogenic sound."8	
	Because of the considerable uncertainty regarding the relative impacts of noise, as well as other threats, any additional anthropogenic stressors to the population must be drastically reduced. Further, due to these anthropogenic factors, the Southern Residents are under tremendous stress and cumulative impacts must be fully evaluated. In particular, any additional incursions or increased activity both within and outside designated critical habitat must be carefully evaluated for impacts to the extinction probability and recovery prospects for this population. As demonstrated by the events of May 5, 2003 in the Strait of Juan de Fuca and Haro Strait (described in further detail in Appendix B), exposure: to military sonar is known to disrupt the behavior of Southern Resident killer whales, and thus particular attention is warranted to the location of any exercises involving sonar. As a recent NMFS Draft Biological Opinion noted, "observations from an event that occurred in the Strait of Juan de Fuca and Haro Strait in 2003 illustrate that mid-frequency sonar can cause behavioral disturbance." NMFS further concluded that "[i]mpacts from [sonar] can range from serious injury and mortality to changes in behavior."	
	Yet the DEIS completely dismisses the potential impacts of Navy sonar on the endangered Southern Resident killer whale community and their endangered salmonid prey. <sup>11</sup>	
NRDC-15	In addition, as we discuss below, the expected increase in vessel traffic and training actions raises the risk of oil or hazardous waste spills both from Navy vessels and from accidents involving other vessels. But neither of those risks are analyzed or fully disclosed in the DEIS. To comply with NEPA, the Navy must fully analyze these impacts and set forth all reasonable mitigation measures to reduce them. At a minimum, the Navy should exclude critical habitat for the Southern Resident killer whales (i.e., the waters of Greater Puget Sound) from training exercises.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
NRDC-16	In addition to the mitigation measures proposed in Section IV, the Navy should also monitor the location of Southern Residents whenever they are outside of the opening to the Strait of Juan de Fuca and report the location to the public with no more than a 24 hr delay between sighting and reporting.	The Navy, in cooperation with the National Marine Fisheries Service, is developing mitigation measures and a monitoring plan for Navy activities in the Northwest Training Range Complex.
NRDC-17	C. Acoustic Impacts  To comply with NEPA, agencies must ensure the "professional integrity, including scientific integrity," of the: discussions and analyses that appear in environmental impact statements. 40 C.F.R. § 1502.24. To that end, they must make every attempt to obtain and disclose data necessary to their analysis. The simple assertion that "no information exists" will not suffice; unless the costs of obtaining the information are exorbitant, NEPA requires that it be obtained. See 40 C.F.R. § 1502.22(a). Agencies are further required to identify their methodologies, indicate when necessary information is incomplete or unavailable:, acknowledge scientific disagreement and data gaps, and evaluate indeterminate adverse impacts based upon approaches or methods "generally accepted in the scientific community." 40 C.F.R. §§	The marine mammal acoustical analysis is based on the use of the best available and applicable science (see Section 3.9) as it applies to mid-frequency and high-frequency sources used during training in the NWTRC. The Navy has been thorough in its use of all relevant information. The analysis is in full compliance with NEPA.

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	1502.22(2), (4), 1502.24. Such requirements become acutely important in cases where, as here, so much about a program's impacts depend on newly emerging science.	
	In this case, the Navy's assessment of impacts is consistently undermined by its failure to meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. As set forth in greater detail in Appendix C and the attached critique by Dr. Bain, the DEIS disregards a great deal of relevant information adverse to the Navy's interests, uses approaches and methods that would not be acceptable to the scientific community, and ignores whole categories of impacts. In short, it leaves the public with an analysis of harm—behavioral, auditory, and physiological—that is at odds with established scientific authority and practice. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA.	
NRDC-18	D. Other Impacts on Marine Mammals  The activities proposed for the NWTRC may have impacts that are not limited to the effects of ocean noise. Unfortunately, the Navy's analysis of these other impacts is cursory and inadequate.  First, the Navy fails to adequately assess the impact of stress on marine mammals, a serious problem for animals exposed even to moderate levels of sound for extended periods. DEIS at 3.9-60 to 61. As the Navy has previously observed, stress from ocean noise—alone or in combination with other stressors, such as biotoxins—may weaken a cetacean's immune system, making it "more vulnerable to parasites and diseases that normally would not be fatal. Moreover, according to studies on terrestrial mammals, chronic noise can interfere with brain development, increase the risk of myocardial infarctions, depress reproductive rates, and cause malformations and other defects in young—all at moderate levels of exposure. Because physiological stress responses are highly conservative across species, it is reasonable to assume that marine mammals would he subject to the same effects, particularly-as appears to be the case here—if they are resident animals exposed repeatedly to a variety of stressors in the NWTRC. Yet despite the potential for stress in marine mammals and the significant consequences that can flow from it, the Navy unjustifiably assumes that such effects would be minimal.	Exposure to mid or high frequency active sonar is not a chronic occurrence in the NWTRC. Sonar pings are intermittent, occurring several times a minute. The predominant use of ship sonar in the NWTRC is during single-ship transits, and there are no large-scale exercises in which multiple ship sonars are in use simultaneously. Given the manner in which sonar is typically used, it is extremely unlikely that individual animals would be exposed to sonar for extended periods. Studies of odontocetes chased during purse seining of tuna showed stress effects when pursued for long periods (30-40 minutes) but most of those animals recovered (Edwards 2007 International Journal of Comparative Psychology, 20: 217-227.). Animals exposed to sonar may only be exposed 2-3 times a minute for several minutes.
NRDC-19	Second, the Navy fails to consider the risk of ship collisions with large cetaceans, as exacerbated by the use of active acoustics. DEIS 3.9-6, 69. For example, right whales have been shown to engage in dramatic surfacing behavior, increasing their vulnerability to ship strikes, on exposure to midfrequency alarms above 133 dB re 1uP (SPL)-a level of sound that can occur many tens of miles away from the sonar systems slated for the range. DEIS 3.9-69. A conservative approach would assume that other large whales (which, as the DEIS repeatedly notes, are already highly susceptible to vessel collisions) are subject to the same hazard. For instance, fin whales also occur within the NWTRC and appear to be particularly vulnerable to ship strikes.	Ship strikes were discussed in the Draft EIS/OEIS, Section 3.9.2.2.1. Results of the research by Nowacek et al (2004) where right whales reacted to an "alert stimuli", used a sound source that has almost no correlation to MFA sonar. The result of that study were, however, used to develop the risk function from which the quantification of predicted exposures was derived.

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NRDC-20	Indeed, in a recent 16-year survey of ship strikes in Washington State waters, fin whales "had the highest incidence of ante-mortem ship strike" of the seven species of large whales examined. But in discussing the effects of vessels on fin whales, the DEIS presents only the most conclusory assertions about the whales' potential responses to approaching vessels and discounts both the risk and consequences of vessel strikes. See DEIS 3.9-89 (asserting only that it "is likely that fin and humpback whales would have little reaction to vessels that maintain a reasonable distance from the animals"); id. at 3.9-92, 106, 111 (Alternatives "would have no significant impact on marine mammals."). The DEIS fails to discuss even the potential for mortality or injury to fin whales from ship strikes. NEPA's hard look requires the Navy to undertake a far more detailed examination of this potentially significant source of mortality for fin whales under even the no action Alternative, as well as from the 4 to 10 percent increase in vessel traffic that would occur under alternatives 1 and 2.	The Draft EIS/OEIS does in fact discuss the potential for mortality and injury to whales (including fin whales) in terms of the likelihood of striking them. The DEIS describes the factors that may help to avoid collisions with all marine mammals on p. 3.9-91.  The document cited in the comment, Douglas 2008, documents no Navy collisions and also reports that Navy has tighter and more restrictive procedures for both watchstander and reporting.
NRDC-21	Third, in the course of its training activities, the Navy would release a host of toxic chemicals, hazardous materials and waste into the marine environment that could pose a threat to local wildlife over the life of the range.  Nonetheless, the DEIS fails to adequately consider the cumulative impacts of these toxins on marine mammals from past, current, and proposed training exercises. DEIS 4-14 to 15. Careful study is needed into the way toxins might disperse and circulate within the area and how they may affect marine wildlife.	Past expenditures are part of the baseline environmental conditions described in Chapter 3.4.2.1.6 of the Draft EIS/OEIS. The Draft EIS/OEIS Chapter 3.4.3.2 evaluated the proposed future expenditure and environmental fate of a variety of training materials. Both qualitative and quantitative assessments of these expenditures conclude that their effects on water quality and bottom sediments, and on the biota that inhabit these environments, would be negligible. A cumulative impact is the sum of the Proposed Action's effects and the effects of other projects. Thus, while the combined ocean discharges of wastewater treatment plants, urban runoff, marine vessels, and other sources may result in unhealthful concentrations of marine pollutants, the Navy's expended training materials would not contribute to that impact. The EIS/OEIS addresses this issue accordingly.
NRDC-22	The Navy's assumption that toxics would dissipate, become buried in sediment, or would be contained leads to a blithe conclusion that releases of hazardous material would have "no adverse effects." Given the level of training exercise increases proposed in the action alternatives, and the amount of ordnance and other hazardous materials necessary for that training, this discussion is inadequate under NEPA.	The Draft EIS/OEIS document presents a thorough description and analysis in Section 3.3.2.2 of amounts and types of specific training materials as well as chemical composition and breakdown processes of expended materials. The Draft EIS/OEIS concludes from this analysis that there would be no negligible impacts to marine resources.
NRDC-23	Fourth, the Navy does not adequately analyze the potential for and impact of oil spills, particularly to the endangered Southern Resident killer whales. Because the Puget Sound area is home to the world's third largest Navy homeport, the nation's third largest container port complex, Canada's largest port, and one of this country's high volume oil ports, there is a significant existing risk of an oil spill. This risk is exacerbated by increasing, the tempo and intensity of Navy training, which will involve more vessels, more transits, and longer missions throughout the range. The largest oil spill to occur in Washington waters was a result of the Navy vessel General Meiggs (releasing 2.3 million gallons). More recently, on August 4,2006, the USS Nevada, a Navy Trident submarine based at Naval Base Kitsap-Bangor, severed the towline of the tug Phyllis Dunlap and its barge at the entrance to	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.

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	the Strait of Juan de Fuca. Although the tug Phyllis Dunlap was transiting with two empty barges when the incident took place, and was able with support to reestablish its connection, this incident is very similar to one that occurred off Cape Flattery in October 2003 when the Navy sub USS Topeka separated an empty oil barge from its tow and indicates the potential for Navy activities to cause accidents at sea. NOAA considers the possibility of a large spill to be one of the most importan1 short-term threats to killer whales and other coastal organisms in the northeastern Pacific. 20  The Washington State Department of Ecology ranks coastal resources to be the most sensitive and most at risk from oil spills in the State. Though the largest spills in the history of Washington State have occurred off the Washington Coast, spill response today remains hindered by rough seas and lack of response gear appropriate to the operating environment. Even in light of this history and the extraordinarily valuable and sensitive coastal resources	
	that occur in the NWTRC, the Navy currently has none of its spill response or salvage equipment stationed on the coast. Given the nature of the existing risk-let alone the Navy's proposal to expand its use of the range-and the extraordinary value of the marine and coastal resources within the NWTRC, the Navy must consider stationing much equipment under all of the alternatives discussed in the DEIS.	
NRDC-24	Finally, the Navy's analysis cannot be limited only to direct effects, <i>i.e.</i> , effects that occur at the same time and place as the training exercises that would be authorized. 40 C.F.R. § 1508.8(a). It must also take into account the activity's indirect effects, which, though reasonably foreseeable (as the DEIS acknowledges), may occur later in time or are further removed. 40 C.F.R. § 1508.8(b). This requirement is particularly critical in the present case given the potential for sonar exercises to cause significant long-term impacts not clearly observable in the short or immediate term (a serious problem, as the National Research Council has observed) <sup>21</sup> Thus, for example, the Navy must not only evaluate the potential for mother-calf separation but also the potential for indirect effects-on survivabilitythat might arise from that transient change. 40 C.F.R. § 1502.16(b).  Without further consideration of these impacts, and mitigation and alternatives developed to address those impacts, the DEIS does not pass	The potential for indirect effects on marine mammals has been considered in Section 3.9 in developing the methodology for assessing acoustic impacts, and it is thereby acknowledged that direct acoustic harassment of an individual can lead to other, indirect effects. The likely existence of such effects is accounted for in the estimation of "take" and they are otherwise not predictable or amenable to quantification. In addition, as described in this analysis, the training activities being analyzed have been occurring in NWTRC waters using the same equipment for many decades. It is not, therefore, reasonably foreseeable that there are significant long-term effects from the continuation of training by the Navy.
NRDC-25	NEPA muster.  E. Other Impacts on Wildlife The activities proposed for the NWTRC will have impacts that are obviously not limited to the effects on marine mammals. As just one example, the potential impacts to vulnerable upland wildlife and their prey are not adequately disclosed or analyzed in the DEIS. Compared to the No Action Alternative, Alternatives 1 and 2 propose increases in flights over uplands areas. Air Combat Maneuvers will increase from 1353 to 2000 sorties, and HARM Missile Exercise activities will increase from 2724 to 3,000 sorties. Although we were able to find limited information regarding the proposed flights, including Figure 2-2, which provides reference, unfortunately, the scale of that figure makes it difficult to, discern specific impacts.	The Final EIS/OEIS has been revised to consider several terrestrial endangered species that may live beneath the Okanagan or Roosevelt MOAs. Those species are the grizzly bear, woodland caribou, marbled murrelet, spotted owl, and lynx.

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	Of particular concern are the potential impacts of low flights. In the Okanagan Military Operating Area ("MOA") segments B and C, and Roosevelt MOA section B, the lower limit flight altitude is just 300 feet. Although the DEIS states that the "preponderance of air activities occur at high altitudes," without any specific details, however, it remains unclear how many flights will be low altitude. The Final EIS must disclose how many low flights are included in Alternatives 1 and 2, as well as how much of an increase or decrease is this relative to the No Action Alternative. It must also evaluate the impacts of these flights on wildlife and recreation.  For instance, it is not clear what the impact of increased flights will be on vulnerable wildlife, such as federally and state listed species. The omission of	
	the BE compounds our inability to understand and comment upon the Navy's conclusions.	
NRDC-26	Section 3.11.2.2 includes a good discussion regarding how noise can impact wildlife generally, but there is no detail regarding how noise impacts to specific species that will actually be impacted by the proposed actions. Flights close to the ground may disturb the natural behavior of vulnerable wildlife and cause them to flee. Effects may include: in the harsh mountain environment animals my flee to steep areas where the risk of falling or avalanche are higher; large amounts of energy might be expended as an animal flees through deep snow; predation might be more likely when an animal abandons cover; an animal may abandon denning, nesting, or critical habitat; and prey may flee the area. The DEIS contains no discussion of these or other such issues. The Final EIS must evaluate and disclose potential impacts to specific species. It must discuss how such impacts be reduced or mitigated. In addition, for impacted species listed as threatened or endangered, the Navy must consult with NOAA or U.S. Fish and Wildlife Service to fully evaluate any impacts, to these species or their critical habitat.	Impacts to specific species have been included in the Final EIS/OEIS. The Navy is consulting with the U.S. Fish and Wildlife Service on all potentially impacted endangered species.
NRDC-27	III. The Navy Failed to Analyze the Impacts on Fish and Fisheries  The DEIS also fails to evaluate the impacts of anthropogenic sound on fish and fisheries. Though the architecture of their ears may differ, fish are equipped, like all vertebrates, with thousands of sensory hair cells that vibrate with sound; and a number of specialized organs like the abdominal sac, called a "swim bladder," that some species possess which can boost tearing. Fish use sound in many of the ways that marine mammals do: to communicate, defend territory, avoid predators, and, in some cases, locate prey. One series of recent studies showed that passing airguns can severely damage the hair cells of fish (the organs at the root of audition) either by literally ripping them from their base in the ear or by causing them to "explode." Fish, unlike mammals, are thought to regenerate hair cells, but the pink snapper in these studies did not appear to recover within approximately two months after exposure, leading researchers to conclude that the damage was pennanent. It is not clear which elements of the sound wave contributed to the injury, or whether repetitive exposures at low amplitudes or a few exposures at higher pressures, or both, were	Assessment of sounds was presented in the Draft EIS/OEIS for the various acoustic sources expected in the NWTRC as a result of training activities. Noise sources include marine vessels, aircraft overflights, sonar, and detonations.

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	responsible. 26 Sound has also been shown to induce temporary hearing loss in fish. Even at fairly moderate levels, noise from outboard motor engines is capable of temporarily deafening some species of fish, and other sounds have been shown to affect the short-term hearing of a number of other species, including sunfish and tilapia. 27 For any fish that is dependent on sound for predator avoidance and other key functions, even a temporary loss of hearing (let alone the virtually permanent damage seen in snapper) will substantially diminish its chance of survival. 28	
NRDC-28	Hearing loss is not the only effect that ocean noise can have on fish. For years, fisheries in various parts of the world have complained about declines in their catch after intense acoustic activities (including naval exercises) moved into the area, suggesting that noise is seriously altering the behavior of some commercial species. Pagroup of Norwegian scientists attempted to do document these declines in a Barents Sea fishery and found that catch rates of haddock and cod (the latter known for its particular sensitivity to low frequency sound) plummeted across a 1600 square-mile area surrounding an airgun survey; in another experiment, catch rates of rockfish were similarly shown to decline. Drops in catch rates in these experiments range from 40 to 80 percent. A variety of other species, herring, zebrafish, pink snapper, and juvenile Atlantic salmon, have also been observed to react to 'various noise sources with acute alarm.  In their comments on the Navy's DEIS for the proposed Undersea Warfare Training Range off North Carolina, several fishermen and groups of fishermen independently reported witnessing sharp declines in catch rates of various species when in the vicinity of Navy exercises. These reports are indicative of behavioral changes, such as a spatial redistribution of fish within the water column, that could affect marine mammal foraging as well as human fisheries. In addition, as NMFS has observed, the use of midfrequency sonar could affect the breeding behavior of certain species, causing them, for example, to cease their spawning choruses, much as certain echolocation signals do. The repetitive use of sonar and other active acoustics could have significant adverse behavioral effects on some species of fish and those who depend on them.	Acoustic effects other than hearing loss were analyzed in the Draft EIS/OEIS. The range of acoustic effects analyzed includes no effects, small behavioral effects, significant behavioral effects, temporary loss of hearing, and physical damage. Scientific studies concerning sounds relevant to Navy activities in the NWTRC were evaluated in the Draft EIS/OEIS.  The Draft EIS/OEIS included new findings by Popper et al. (2007) who exposed rainbow trout, a fish sensitive to low frequencies, to high-intensity low-frequency sonar (215 dB re 1 µPa2 170-320 Hz) with receive level for two experimental groups estimated at 193 dB for 324 or 648 seconds. Fish exhibited a slight behavioral reaction, and one group exhibited a 20-dB auditory threshold shift at one frequency. No direct mortality, morphological changes, or physical trauma was noted as a result of these exposures. While low-frequency sonar is not included in the NWTRC Proposed Action, these results of low-frequency sonar effects on low-frequency sensitive rainbow trout are encouraging in that similar results may be found with mid-frequency active sonar use when applied to mid-frequency sensitive fish. The effects of airguns (used in seismic surveys) on fish are undoubtedly more extreme than those of MFA sonar because of the intensity and broadbandwidth of the airgun sound source.  Exposure to mid or high frequency active sonar is not a chronic occurrence in the NWTRC. Sonar pings are intermittent, occurring several times a minute. The predominant use of ship sonar in the NWTRC is during single-ship transits, and there are no large-scale exercises in which multiple ship sonars are in use simultaneously. Given the manner in which sonar is typically used, it is extremely unlikely that any species of fish would be exposed to sonar repetitively or for extended periods.
NRDC-29	Moreover, as the Navy is aware after recently completing consultation with both NMFS (for salmon) and the U.S. Fish and Wildlife Service (for bull trout) over its Explosive Ordinance Disposal ("EOD") training exercises in Puget Sound, underwater explosions are responsible for high direct mortality to fish species present in the area. Indeed, the underwater detonation of just five pounds of plastic explosives has been observed to kill over 5,000 fish with swim bladders, with more accurate estimates ranging as high as 20,000 fish. While the DEIS notes that EOD activities have largely been shifted to Imperial Beach, CA, there are a variety of live-fire training exercises, some of	Assessment of underwater detonation impacts are divided between those occurring offshore in the PACNW OPAREA, and those occurring at the EOD ranges. Under the proposed action, only 4 detonations of 2.5 lbs of C-4 would be detonated at the EOD ranges (maximum of 2 at Crescent Harbor, maximum of 1 at Indian Island, and maximum of 1 ay Floral Point). Specific underwater detonation mitigation measures are presented in Section 5.1.7 limiting the number of charges at the EOD sites to four detonations a year.  Additionally, the EIS recognizes that live hard-bottom, artificial reefs,

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	which involve underwater explosions of torpedoes and other ordnance, that will take place in the NWTRC under all three alternatives. Given the variety of threatened and endangered fish species inhabiting these waters - including but not limited to salmon runs that the region is spending billions of dollars in an attempt to recover - the DEIS's failure to analyze these effects in any detail is stunning.	seagrass beds, and kelp beds harbor a wide variety of marine organisms. These habitats support productive biological assemblages and dense aggregations of fish. The Navy selects UNDET areas to avoid these key habitats. NWTRC underwater detonations would only take place in waters overlying unconsolidated sediment (sandy or muddy bottoms), thus avoiding aggregations of fish. Thus, the cratering of soft-bottom seafloor is the only habitat disruption that could result.
		The potential impacts to fish species from the non-EOD activities are addressed in Section 3.7 of the EIS/OEIS.
		The EIS addresses the T&E species in the NWTRC, as listed in table 3.7.3 of the EIS. Additionally, the EFH document describes and analyses the impacts to the variety of fish species found in the NWTRC with regards to essential fish habitat.
NRDC-30	Although the nation's fish and wildlife agencies, and the studies detailed above document impacts to fish from both noise and underwater explosions, the DEIS nonetheless concludes that there would be no adverse effects on fish from its increased sonar training activities and explosive detonations. DEIS at 3.7-52 to 57. Such a conclusion is at odds with the scientific literature.	The Draft EIS/OEIS concludes that there would be no adverse effects on fish populations or fish habitat. It is clear that individual fish will be affected, but the numbers of fish affected are low and as such will not impact the overall populations of those particular species.
NRDC-31	The Navy's conclusion also ignores the literature on noise exposure and fish development. A number of studies, including one on non-impulsive noise, show that intense sound can kill eggs, larvae, and fry outright or retard their growth in ways that may hinder their survival later. Significant mortality for fish eggs has been shown to occur at distances of 5 meters from an airgun source; mortality rates approaching 50 percent affected yolksac larvae at distances of 2 to 3 meters. With respect to mid-frequency sonar, the Navy itself has noted that "some sonar levels have been shown [in Norwegian studies] to be powerful enough to cause injury to particular size classes of juvenile herring from the water's surface to the seafloor. Also, larvae in at least some species are known to use sound in selecting and orienting toward settlement sites. Acoustic disruption at that stage of development could have significant consequences. Although the Navy acknowledges that eggs and larvae may be more susceptible to sound, it caveats that acknowledgement with the excuse that "more well-controlled studies are needed." DEIS at 3.7-38. However, NEPA does not allow the Navy to ignore the valid scientific studies that have already been conducted simply because they are contrary to its interest.	The Draft EIS/OEIS included new findings by Popper et al (2007) who exposed rainbow trout, a fish sensitive to low frequencies, to high-intensity low-frequency sonar (215 dB re 1 $\mu$ Pa2 170-320 Hz) with receive level for two experimental groups estimated at 193 dB for 324 or 648 seconds. Fish exhibited a slight behavioral reaction, and one group exhibited a 20-dB auditory threshold shift at one frequency. No direct mortality, morphological changes, or physical trauma was noted as a result of these exposures. While low-frequency sonar is not included in the Proposed Action, these results of low-frequency sonar effects on low-frequency sensitive rainbow trout are encouraging in that similar results may be found with mid-frequency active sonar use when applied to mid-frequency sensitive fish.
NRDC-32	After glossing over the effects of noise on fish in only two short paragraphs, the Navy capriciously dismisses the potential for adverse impacts on fish. DEIS 3.7-37 to 38. Such analysis does not meet the requirements of NEPA. The Navy must rigorously analyze the potential for behavioral, auditory, and physiological impacts on fish, including the potential for population-level effects, using models of fish distribution and population structure and conservatively estimating areas of impact from the available literature. 40 C.F.R. § 1502.22. It must also provide appropriate mitigation measures, such as avoidance of spawning grounds and of important habitat for fish species,	Pages 3.7-16 through 3.7-22 as well as 3.7-26 through 3.7-30 of the EIS address hearing in fish as well Acoustic Effects of Underwater Sounds to Fish and Effects of Underwater Impulsive Sounds. This is presented in detail to give the framework and the reasoning for the statements made in DEIS 3.7-37 to 38. Areas of impact are discussed in relation to fish size and swim-bladder using recent and best science available.  Additionally, the EIS recognizes that live hard-bottom, artificial reefs, seagrass beds, and kelp beds harbor a wide variety of marine organisms.

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	especially hearing specialists. Finally, the Navy should consider excluding designated critical habitat for listed species such as salmon in the NWTRC from training exercises.	These habitats support productive biological assemblages and dense aggregations of fish. The Navy selects UNDET areas to avoid these key habitats. NWTRC underwater detonations would only take place in waters overlying unconsolidated sediment (sandy or muddy bottoms), thus avoiding aggregations of fish. Thus, the cratering of soft-bottom seafloor is the only habitat disruption that could result.
		Specific underwater detonation mitigation measures are presented in Section 5.1.7 limiting the size of charges at the EOD sites during periods when migrating salmon may be present, thus further reducing zone of influence from underwater detonations.
NRDC-33	IV. The Proposed Mitigation Measures Fail to Protect Marine Wildlife To comply with NEPA, an agency must discuss measures designed to mitigate its project's impact on the environment. See 40 C.F.R. § 1502.14(f). There is a large and growing set of options for the mitigation of noise impacts to marine mammals and other marine life, some of which have been imposed by foreign navies <sup>40</sup> —and by the Navy itself, in other contexts-to limit harm from high-intensity sonar exercises. Yet here the Navy does little more than set forth an abbreviated set of measures, dismissing effective measures out of hand. All of the mitigation that the Navy has proposed for sonar impacts boils down to the following: a very small safety zone around the sonar source, maintained primarily with visual monitoring by personnel with other responsibilities, with aid from shipboard passive monitoring when personnel are already using such technology. Under the proposed scheme, operators would power-down the system if a marine mammal is detected within 1,000 yards and shut-down the system if a marine mammal is detected within 200 yards. DEIS at 5-9 to 12.	Each nation has its own training needs based on that nation's forces, capabilities and missions. For the U.S. Navy, the ability to conduct ASW in the shallow water environment is critically necessary in order to fight the growing diesel submarine threat.  The Navy, in cooperation with NMFS, has developed effective mitigation measures as described in the Draft EIS/OEIS.  As described in more detail to specific comments that follow, several measures were eliminated because they were determined to be infeasible, present a safety risk, provide no known or ambiguous protective benefits, or to have an unacceptable impact on training fidelity.
NRDC-34	This mitigation scheme disregards the best available science on the significant limits of visual monitoring. Visual detection rates for marine mammals generally approach only 5 percent. Moreover, the species perhaps most vulnerable to sonar-related injuries, beaked whales, are among the most difficult to detect because of their small size and diving behavior. It has been estimated that in anything stronger than a light breeze, only one in fifty beaked whales surfacing in the direct track line of a ship would be sighted; as the distance approaches 1 kilometer, that number drops to zero. The Navy's reliance on visual observation as the mainstay of its mitigation plan is therefore profoundly misplaced.	The Navy's mitigation plan is more than just visual monitoring. Aerial monitoring and passive acoustic monitoring are used as well. The Draft EIS/OEIS, Chapter 5.0, Mitigation Measures, presented the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. Navy does not expect that 100% of the animals present in the vicinity of training events will be detected and the acoustic impact modeling quantification is not reduced as a result of mitigation effectiveness. In addition, the probability of trackline detection is for visual observers during a survey. In general, there will be more ships, more observers present on Navy ships, and additional aerial assets all engaged in exercise events having the potential to detect marine mammals, than is present on a single, generally smaller (having a lower height of eye), survey ship.
NRDC-35	The Navy's ineffective mitigation measures are all the more remarkable given its adoption of more protective measures during previous training. For example, the Atlantic Fleet has repeatedly sited exercises beyond the continental shelf and Gulf Stream, relocated exercises out of important habitat and to avoid certain species, and used a technique called "simulated	Examples cited for the Atlantic Fleet are not necessarily relevant in the Pacific Northwest where the species and the environment differ.  It is critical that Navy be able to conduct ASW training in a variety of environment and bathymetric conditions, including in the vicinity of canyons. The canyon allows a submarine to hide in an area that is

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	geography" to avoid canyons and near-shore areas on at least three of its major ranges. It has also restricted sonar use at night when marine mammals are harder to detect, as well as minimized the use of sonar from multiple sources at the same time. 42	shadowed by the canyon walls because the active transmission cannot reach the sub via the bottom bounce path. Therefore, it is critical to operate MFA sonar in areas of high bathymetric variability.  The Navy, in conjunction with the NMFS, has considered numerous
	In this light, the Navy's claims that it cannot implement more protective mitigation measures ring false. DEIS at 5-22 to 28. Although the Navy goes to some pain to describe "alternative mitigation measures considered but eliminated"—primarily for "training effectiveness" reasons—its previous adoption of the same measures belies its argument. Clearly the Navy has done more to mitigate the harmful effects of sonar in previous exercises than what it proposes for the NWTRC. It can, and must, do more to mitigate the harm on marine wildlife.	mitigation measures during the development of this EIS/OEIS (Chapter 5). The mitigation measures adopted were determined to be the most effective and scientifically supported measures.
	A. <u>Protection Zones</u> To mitigate sonar's harmful effects on marine wildlife, the Navy should adopt protection zones in which sonar activity will be banned. Based on our preliminary analysis of marine mammal densities and habitat in the Pacific Northwest, we call for the following exclusion areas for sonar:	This EIS/OEIS does not propose sonar training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The Final EIS/OEIS has been revised to provide clarification.
NRDC-36	1) All inshore waters of Greater Puget Sound (including the Strait of Juan de Fuca and Strait of Georgia) - This area is one of the most important habitats for the Southern Resident community of killer whales (and their nearly-exclusive habitat in summer/autumn months). The population is listed as Endangered under the ESA. In addition, Greater Puget Sound also constitutes important habitat for many other marine mammal species, including minke whales, harbor porpoises, Dall's porpoises, and several species of pinnipeds. Another issue is that the enclosed nature of the Sound, with its many steep, reflective rock walls, heightens concerns about the behavior of sonar signals in this area.	
NRDC-37	2) Lower Continental Slope waters between the 500 and 2,000 m depth contours - This area represents the most important habitat for beaked whales in the area. There is good supporting evidence for their preference for this type of habitat (see Appendix A), and due to the year-round presence of these animals, protection should occur throughout the year. Any Navy plan for the Northwest Pacific should, at minimum, avoid area:) within this bathymetric range with unusual bottom topography (such as canyons), and should include a firm, multi-year commitment to sponsor fine-scale surveys with the aim of identifying important beaked whale habitat for avoidance.	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding MFA and HFA sonar use within 12 nm from shore or, in the alternative, 15.5 miles (25 kilometers) from the 200-meter isobath)
NRDC-38	3) Outer coastal waters between the shoreline and the 100 m depth contour (and buffer zone) - This area, bounded by the mainland shoreline and the 100 m contour, represents vital habitat for two discrete populations of harbor porpoise. The species is known for its high sensitivity to acoustic sources, responding strongly to various sources of anthropogenic noise at pressure levels well below 140 dB re 1 µPa. Indeed, for its EIS on Atlantic Fleet sonar training, the Navy included in its take estimates any harbor porpoise exposed to sound pressure levels above 120 dB. The species' use of near-coastal habitats only adds to its vulnerability. To protect this sensitive species	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding MFA and HFA sonar use within 12 nm from shore or, in the alternative, 15.5 miles (25 kilometers) from the 200-meter isobath)

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	and near-coastal habitat, a robust buffer zone should be applied beyond the 100 m contour, and exercises should be planned to eliminate or minimize ship movements towards shore when sonar systems are active.	
NRDC-39	4) Canyons and Banks of Northern Washington State and Oregon – The "Prairie," Juan de Fuca Canyon, Swiftsure Bank, Barkley and Nitnat Canyons, and Heceta Bank are used as important feeding habitat for humpback whales and other species. These areas should be avoided at least during the main humpback whale feeding season from June to October.	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding habitats and complex/steep bathymetry, including seamounts, and employing seasonal restrictions)
NRDC-40	5) Olympic Coast National Marine Sanctuary - As noted in Section II.A and Appendix A, the Sanctuary provides habitat for twenty-nine species of marine mammals, including foraging habitat for Southern Resident killer whales and humpback whales, and other species. A recent NOAA report found that "an increase in Navy activity or areas of operation, if not properly controlled, could have potential to disturb the seabed, introduce pollutants associated with test systems, and produce sound energy that could negatively alter the acoustic environment within the sanctuary." Any Navy plan for the training range must include measures to eliminate or very substantially limit the number of exercises taking place in Sanctuary waters.	As described in the Draft EIS/OEIS, the Navy does not expect its actions to negatively impact any sanctuary resource.  The Navy conducts activities in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities, per the OCNMS regulations.
NRDC-41	B. Other Mitigation Measures     In addition to the specific protection zones set forth above, the Navy should adopt the following measures:     1) Seasonal avoidance of marine mammal feeding grounds, calving grounds, and migration corridors;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding habitats and complex/steep bathymetry, including seamounts, and employing seasonal restrictions)
NRDC-42	2) Avoidance of or extra protections in other federal and state marine protected areas, including the Waketickeh Creek Marine Protected Area, Copalis Marine Protected Area, Quillayute Needles Marine Protected Area, and other Marine Protected Areas in the areas considered.	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Limiting the active sonar event locations)
NRDC-43	3) Avoidance of bathymetry likely to be associated with high-value habitat for species of particular concern, including submarine canyons and large seamounts, or bathymetry whose use poses higher risk to marine species;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding habitats and complex/steep bathymetry, including seamounts, and employing seasonal restrictions)
NRDC-44	4) Avoidance of fronts and other major oceanographic features, such as the California Current and other areas with marked differentials in sea surface temperatures, which have the potential to attract offshore concentration of animals, including beaked whales; <sup>46</sup>	Avoiding such large-scale oceanographic features would be incompatible with the purpose and need without demonstrable benefit.
NRDC-45	<ul><li>5) Avoidance of areas with higher modeled takes or with high-value habitat for particular species;</li><li>6) Concentration of exercises to the maximum extent practicable in abyssal waters and in surveyed offshore habitat of low value to species;</li></ul>	Exposure to mid or high frequency active sonar is not a chronic occurrence in the NWTRC. Sonar pings are intermittent, occurring several times a minute. The predominant use of ship sonar in the NWTRC is during single-ship transits, and there are no large-scale exercises in which multiple ship sonars are in use simultaneously. Given the manner in which sonar is typically used, there are no areas with higher modeled takes. Avoiding habitat features and limiting sonar activities as described would be incompatible with the purpose and need without demonstrable

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		benefit.
NRDC-46	7) Use of sonar and other active acoustic systems at the lowest practicable source level, with clear standards and reporting requirements for different testing and training scenarios;	Operators of sonar equipment are trained to be aware of the environmental variables affecting sound propagation. In this regard, the sonar equipment power levels are always set consistent with mission requirements. Active sonar is only used when required by the mission since it has the potential to alert opposing forces to the sonar platform's presence. The Navy remains committed to using passive sonar and all other available sensors in concert with active sonar to the maximum extent practicable consistent with mission requirements.
NRDC-47	8) Expansion of the marine species "safety zone" to a 4km shutdown, reflecting international best practice, or 2 km, reflecting the standard prescribed by the California Coastal Commission; <sup>47</sup>	The current power down and shut down zones are based on scientific investigations specific to MFA sonar for a representative group of marine mammals. They are based on the source level, frequency, and sound propagation characteristics of MFA sonar. The zones are designed to preclude direct physiological effect from exposure to MFA sonar. Specifically, the current power-downs at 500 yards and 1,000 yards, as well as the 200 yard shut-down, were developed to minimize exposing marine mammals to sound levels that could cause TTS and PTS. These safety zone distances were based on experiments involving distances at which the onset of TTS and PTS were identified. They are also supported by the scientific community.
NRDC-48	9) Suspension or relocation of exercises when beaked whales or significant aggregations of other species, such as killer whales, are detected by any means within the orbit circle of an aerial monitor or near the vicinity of an exercise;	Any marine mammal sighting during an exercise is reported within the chain of command in order to facilitate implementation of appropriate protective measures.
NRDC-49	10) Use of simulated geography (and other work-arounds) to reduce or eliminate chokepoint exercises in near-coastal environments, particularly within canyons and channels, and use of other important habitat;	This restriction is not applicable to training in the NWTRC as described in Section 5.2.1.5 of the Draft EIS/OEIS.  The predominant use of ship sonar in the NWTRC is during single-ship transits, and there are no large-scale exercises in which chokepoints or nearshore areas are used. Given the manner in which sonar is typically used, this measure would not apply for activities proposed in this EIS/OEIS.
NRDC-50	11 ) Avoidance or reduction of training during months with historically significant surface ducting conditions, and use of power-downs during significant surface ducting conditions at other times;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Reducing power in significant surface ducting conditions)
NRDC-51	12) Use of additional power-downs when significant surface ducting conditions coincide with other conditions that elevate risk, such as during exercises involving the use of multiple systems or in beaked whale habitat;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Reducing power in significant surface ducting conditions)
NRDC-52	13) Planning of ship tracks to avoid embayments and provide escape routes for marine animals;	This restriction is not applicable to training in the NWTRC. Exercises involving sonar are performed offshore in the PACNW OPAREA and are thus located away from embayments.
NRDC-53	14) Suspension or postponement of chokepoint exercises during surface ducting conditions and scheduling of such exercises during daylight hours;	This restriction is not applicable to training in the NWTRC.

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NRDC-54	15) Use of dedicated aerial monitors during chokepoint exercises, major exercises, and near-coastal exercises;	This restriction is not applicable to training in the NWTRC.
NRDC-55	16) Use of dedicated passive acoustic monitoring to detect vocalizing species, through established and portable range instrumentation and the use of hydrophone arrays off instrumented ranges;	The Navy will continue to use its passive detection capabilities to the maximum extent practicable consistent with the mission requirements to alert training participants to the presence of marine mammals in an event location.
NRDC-56	17) Modification of sonobuoys for passive acoustic detection of vocalizing species;	Sonobuoy modification is not warranted for the limited scope and type of activities as proposed in this EIS/OEIS.
NRDC-57	18) Suspension or reduction of exercises outside daylight hours and during periods of low visibility;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Suspending training at night, periods of low visibility and in high sea-states when marine mammals are not readily visible)
NRDC-58	19) Use of aerial surveys and ship-based surveys before, during, and after major exercises;	This restriction is not applicable to training in the NWTRC. There are no major ASW exercises conducted.
NRDC-59	20) Use of all available range assets for marine mammal monitoring;	All assets involved in training exercises in the NWTRC conduct surveillance of the area in which they are training. All marine mammal sightings are reported to the chain of command.
NRDC-60	21) Use of third-party monitors for marine mammal detection;	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Augmenting navy lookouts on Navy vessels providing surveillance of ASW or other training events with non-Navy personnel; and Employing non-Navy observers on non-military aircraft or vessels)
NRDC-61	22) Establishment of long-term research, to be conducted through an independent agent such as the National Fish and Wildlife Foundation, on the distribution, abundance, and population structuring of protected species in the NWTRC, with the goal of supporting adaptive geographic avoidance of high value habitat. Notably, additional critical habitat is likely to be identified in the NWTRC, and research should be undertaken to identify this critical habitat;	Section 5.2.1.3 of the Draft EIS/OEIS describes the Navy's conservation measures, which include the application of adaptive management principles and the Navy's research efforts. The Navy is confident that its measures ensure continued, effective environmental stewardship.
NRDC-62	23) Application of mitigation prescribed by state regulators, by the courts, by other navies or research centers, or by the U.S. Navy in the past or in other contexts;	The Navy has worked closely with NMFS to develop mitigation measures appropriate for the proposed action.  Adopting mitigation measures of foreign nation navies mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS.
NRDC-63	24) Avoidance of fish spawning grounds and of important habitat for fish species potentially vulnerable to significant behavioral change, such as widescale displacement within the water column or changes in breeding behavior;	The analysis in this EIS/OEIS indicates that the proposed activities would pose no threat to fish populations, therefore this measure would be unnecessary.
NRDC-64	25) Evaluating before each major exercise whether reductions in sonar use are possible, given the readiness status of the strike groups involved;	There are no major exercises conducted within the NWTRC. However, Scaling down to meet core aims was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS.
NRDC-65	26) Dedicated research and development of technology to reduce impacts of	Section 5.2.1.3 of the Draft EIS/OEIS describes the Navy's conservation

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	active acoustic sources on marine mammals;	measures, which include the application of adaptive management principles and the Navy's research efforts. The Navy is confident that its measures are effective at minimizing impacts to marine mammals.
NRDC-66	27) Establishment of a plan and a timetable for maximizing synthetic training in order to reduce the use of active sonar training;	The Draft EIS/OEIS discussed the value and use of synthetic training, and specifically the limits of simulation as it applies to ASW in Section 2.3.2.2.
NRDC-67	28) Prescription of specific mitigation requirements for individual classes (or sub-classes) of testing and training activities, in order to maximize mitigation given varying sets of operational needs; and	These measures were included in the Draft EIS/OEIS in Section 5.2.1.2 – Measures for Specific Training Events.
NRDC-68	29) Timely, regular reporting to NOAA, state coastal management authorities, and the public to describe and verify use of mitigation measures during testing and training activities.	The Navy has developed a Marine Species Monitoring Plan (MSMP) that provides recommendations for site-specific monitoring for MMPA and ESA listed species (primarily marine mammals) within the NWTRC, including during training exercises. The primary goals of monitoring are to evaluate trends in marine species distribution and abundance in order to assess potential population effects from Navy training activities and determine the effectiveness of the Navy's mitigation measures.
NRDC-69	Consideration of these measures is minimally necessary to satisfy the requirements of NEPA, and we note that similar or additional measures may be required under the Marine Mammal Protection Act, Endangered Species Act, and other statutes.	This EIS/OEIS fully meets the requirements of NEPA. The Navy is in complete compliance with the Marine Mammal Protection Act, the Endangered Species Act, and all other applicable statutes.
NRDC-70	V. The Navy Fails to Properly Analyze Cumulative Impacts In order to satisfy NEPA, an EIS must include a "full and fair discussion of significant environmental impacts." 40 C.F.R. § 1502.1. It is not enough, for purposes of this discussion, to consider the proposed action in isolation, divorced from other public and private activities that impinge on the same resource; rather, it is incumbent on the Navy to assess cumulative impacts as well, including the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future significant actions." Id. § 1508.7. A meaningful cumulative impact analysis must identify (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions-past, present, proposed, and reasonably foreseeable-that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate. <i>Grand Canyon Trust v. FAA</i> , 290 F.3d 339,345 (D.C. Cir. 2002) (quotation and citation omitted). The Navy "cannot treat the identified environmental concern in a vacuum." <i>TOMAC v. Norton</i> , 433 F.3d 852,863 (D.C. Cir. 2006) ( <i>quoting Grand Canyon Trust</i> , 290 F.3d at 345). The Navy's cumulative impact analysis fails to meet these basic requirements. Nowhere in its cumulative impact analysis does the Navy consider-let alone reach the conclusion-that the sum of the various environmental impacts that are enumerated will be limited. DEIS at 4-1 to 34. The Navy's analysis cannot provide such support because the Navy fails to explain what the sum of these impacts is expected to be. NEPA requires	Cumulative impacts have been considered in the Draft EIS/OEIS. As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3. The Draft EIS/OEIS considered its activities alongside those of other activities in the region.  The entire Draft EIS/OEIS provides the cumulative impacts analysis, not just Chapter 4. Chapter 3, in particular, provides the past and present impacts and environmental conditions that represent the baseline, and Chapter 3 also discusses the consequences or potential future impacts from Navy activities. Chapter 4, then, discusses the other reasonably foreseeable activities to the extent they are known and the incremental impact of the Navy's proposal when added to past, present, and future impacts.

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	more than just a recital of possible impacts: it requires the Navy to actually analyze the overall impact of the accumulation of individual impacts. <i>Grand Canyon Trust</i> , 290 F.3d at 345. The DEIS fails to make this analysis.	
NRDC-71	The Navy must also consider the full effects of its sonar training. It simply assumes that all behavioral impacts are short-term in nature and cannot affect individuals or populations through repeated activityeven though the anticipated takes at its preferred alternative would affect the same populations.	The conclusion that sonar effects are short-term in nature is based on the analysis of the proposed sonar activities. Those activities, very short-term in nature, and spread out both temporally and geographically, are not likely to significantly impact any species of fish or marine mammal.
NRDC-72	Nor does the Navy consider the potential for acute synergistic effects from sonar training. Although the DEIS discusses the potential for ship strike in the training area (DEIS 4-24 to 25), it does not consider the greater susceptibility to vessel strike of animals that have been temporarily harassed or disoriented by certain noise sources. The absence of analysis is particularly glaring in light of the Haro Strait incident, in which killer whales and other marine mammals were observed fleeing away from the sonar vessel at high speeds. Neither does the Navy consider the synergistic effects of noise with other stressors in producing or magnifying a stress-response. For these reasons alone, the Navy should have concluded that the cumulative and synergistic impacts from sonar training are significant and focused its efforts to analyze and develop mitigation measures to avoid those impacts.	The Navy has not found any information to suggest that animals exposed to MFA/HFA sonar would be more susceptible to vessel collisions. Additionally, Appendix E describes Haro Strait in detail and also highlights the variability of observer reports with regards to orca behavior on May 5, 2003.
NRDC-73	The Navy acknowledges that the NWTRC is crowded with human and military activities, many of which introduce noise, chemical pollution, debris, and vessel traffic into the habitat of protected species. DEIS at 4-22 to 27. Yet it inexplicably fails to conclude what the cumulative effects will be for all those activities.  Given the scope of the proposed action, the deficiencies of the Navy's cumulative impacts assessment represents a critical failure of the DEIS. At a minimum, the Navy must evaluate the potential for cumulative impacts on populations that would occur in and near the NWTRC, clearly define the extent of expected cumulative impacts, and assess the potential for synergistic adverse effects (such as from noise in combination with shipstrikes).	The entire Draft EIS/OEIS provides the cumulative impacts analysis, not just Chapter 4. Chapter 3, in particular, provides the past and present impacts and environmental conditions that represent the baseline, and Chapter 3 also discusses the consequences or potential future impacts from Navy activities. Chapter 4, then, discusses the other reasonably foreseeable activities to the extent they are known and the incremental impact of the Navy's proposal when added to past, present, and future impacts.
NRDC-74	VI. The Navy Fails to Properly Analyze Reasonable Alternatives  NEPA requires agencies to consider alternatives to their proposed actions.  To comply with NEPA, an EIS must "inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. This alternatives requirement has been described in regulation as "the heart of the environmental impact statement." Id. § 1502.14. The courts describe the alternatives requirement equally emphatically, citing it as the "linchpin" of the EIS. Monroe County Conservation Council v. Volpe, 472 F.2d 693 (2d Cir. 1972). The agency must therefore "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14(a). Consideration of alternatives is	See responses to specific comments below.

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	required by (and must conform to the independent terms of) both sections 102(2)(C) and 102(2)(E) of NEPA. Here, the Navy's alternatives analysis misses the mark.	
NRDC-75	A. Failure to Identify Environmental Impact-Based Alternatives  The Navy claims it "considers potential environmental impacts" while executing its responsibilities under federal law, including NEPA. DEIS at 1-1. But the Navy's alternatives were not selected to "inform decision-makers and the public" of how the Navy could "avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. Instead, as discussed in the DEIS and below, the Navy chose alternatives based on factors unrelated to the proposed action's environmental impacts.	The Navy complied with NEPA requirements in the selection of alternatives.  The EIS/OEIS "shall provide a full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. Each of the alternatives selected and analyzed minimize adverse impacts to the human environment.  The EIS "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. This EIS/OEIS does this.  The Navy shall "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14(a). This EIS/OEIS does this. (To be "reasonable," an alternative must meet the stated purpose and need for the Proposed Action.)
NRDC-76	Further, at no point in the DEIS does the Navy discuss how the alternatives pose different environmental choices for the public and decisionmakers. The DEIS fails entirely to comply with NEPA's regulations, requiring the Navy to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among option by the decisionmaker and the public." 40 C.F.R. § 1502.14. The Navy fails to sharply define the environmental issues applicable to each alternative and include these differences in a comparison of alternatives. There is simply no comparison of the risks and benefits of each alternative site showing what is and is not known and what species and habitats would be most at risk from each alternative.	The DEIS presents the environmental impacts of the proposal and the alternatives in a directly comparative manner within the executive summary as well as at the conclusion of each resource section. Within each resource section, impacts from the No Action Alternative are presented, followed by thorough discussions of Alternative 1 and Alternative 2 that discuss potential impacts of the action alternatives as they relate to impacts presented under the No Action Alternative. In this manner, the DEIS does indeed satisfy NEPA regulations to "present the environmental impacts of the proposal and the alternatives in comparative form".
NRDC-77	B. Identification of Alternative Sites  The DEIS does not include any discussion of alternative sites, instead proposing a No Action alternative (maintaining the current level of activities), Alternative 1 (increasing training activities and force structure changes), and the preferred Alternative 2 (increasing training activities, force structure changes and range enhancements). The Navy's analysis is devoid of geographic alternatives. The information the Navy does include indicates that factors of convenience and cost dominated the decision. Factors of mere convenience alone cannot dictate an agency's choice of alternatives to evaluate in an EIS. An agency must discuss all reasonable alternatives-those that will accomplish the purpose and need of the agency and are practical and feasible-not simply those it finds most convenient. 40 C.F.R. § 1502.14.	The statement of the purpose and need for the agency action appropriately defines the range of alternatives to be addressed in an EIS. In identifying the purpose and need for a major federal action, the agency must consider the goals of Congress, such as those expressed in the agency's statutory authorization to act. With regard to the NWTRC, the purpose and need for the agency action is clearly defined in the DEIS. In sum, the purpose and need for Proposed Action is to provide a training environment consisting of ranges, training areas, and range instrumentation with the capacity and capabilities to fully support required training tasks for operational units and military schools. As the DEIS states, the purpose and need furthers the Navy's execution of its statutory roles and responsibilities under Title 10 of the United States Code.

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	"The primary purpose of the impact statement is to compel federal agencies to give serious weight to environmental factors in making discretionary choices." 1-291 Why? Ass'n v. Burns, 372 F.Supp. 233, 247 (D. Conn. 1974). If an agency is permitted to consider and compare the environmental impacts of its proposed action with only equally convenient alternatives-and permitted to omit from such analysis any alternatives that are less convenient, no matter that they might result in significant environmental benefits-this purpose would be thwarted.  Carefully siting the activities proposed to occur in the range to avoid concentrations of vulnerable and endangered species and high abundances of marine life is the most critical step the Navy can take in reducing the environmental impacts of this project. Because the Navy has failed to undertake an alternatives analysis that allows it to make an informed siting choice, however, the DEIS is inadequate and must be revised.	The Navy has developed and fully analyzed appropriate alternatives based on this statement of the purpose and need for the Proposed Action. The DEIS does not, as this comment suggests, summarily dismiss geographic exclusions from its alternatives analysis. As the DEIS states, and as stated in public articulations of the professional military judgment of senior Navy leaders, alternatives that would impose limitations on training locations within the NWTRC, would not support the purpose and need. The analysis mandated by NEPA is not an evaluation of alternative means to accomplish the general goal of an action. Rather, alternatives to be evaluated should be those that reasonably satisfy the specific purpose and need for the agency action.  The underlying need is to conduct training of a specific nature, type, and scope that is required to ensure Navy personnel and units are fully trained. The DEIS appropriately limits its analysis to alternatives that meet the Navy's congressionally mandated training mission. Moreover, the Navy has proposed extensive mitigation measures to reduce any potential impacts on marine species and marine resources.
NRDC-78	C. Other Reasonable Alternatives The DEIS fails to consider any alternatives beyond increasing the level of training. Therefore, many reasonable alternatives are missing from the Navy's analysis that might fulfill that purpose while reducing harm to marine life and coastal resources. For example:  (1) The DEIS fails entirely to consider seasonal restrictions on the use of the range. Instead, all of the action alternatives propose year-round use without regard to seasonal variations in marine mammal and fish abundance. This is true despite the well-documented seasonal migrations of numerous endangered species. For example, the Southern Resident killer whale population is concentrated in the Greater Puget Sound area during the summer and autumn months, and is found along the Washington Coast at other times of the year. Studies have shown that killer whales engage in dramatic flight behavior in response to mid-frequency signals. Yet the DEIS fails even to consider the feasibility of avoiding the whales' seasonal habitat, or any other seasonal variation in marine life abundance (such as migration routes). Omitting even the mere consideration of any alternative that recognizes the need to protect endangered and sensitive marine life is unacceptable.	See response to comment above.
NRDC-79	(2) The DEIS fails to include a range of mitigation measures among its alternatives. Many such measures have been employed by the U.S. Navy in other contexts, as discussed in Section IV; and there are many others that should be considered. Such measures are reasonable means of reducing harm to marine life and other resources on the proposed range, and their omission from the alternatives analysis renders that analysis inadequate.	Please see specific responses to Section IV comments above.
NRDC-80	(3) The Navy declines to consider a reduction in the level of proposed training in the NWTRC. Yet the Navy's assumption that sonar exercises must occur at the level proposed may well be an artifact of the Navy's Tactical Training	This alternative was considered as described in Section 2.3.2.3 of the Draft EIS/OEIS.

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	Theater Assessment and Planning Program (TAP) process, which, in requiring separate environmental analysis of existing ranges and operating areas, seems to assume a priori that exercises cannot be reapportioned.	
NRDC-81	(4) The Navy's statement of purpose and need contains no language that would justify the limited set of alternatives that the Navy considers (or the alternative it ultimately prefers). Yet it is a fundamental requirement of NEPA that agencies preparing an EIS specify their project's "purpose and need" in terms that do not exclude full consideration of reasonable alternatives. 40 C.F.R. § 1502.13; City of Carmel-by-the-Sea v. United States Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997) (citing Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991». "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate," Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992), and an EIS errs when it accepts "as a given" parameters that it should have studied and weighed. Simmons v. Us. Army Corps of Eng'rs, 120 F.3d 664, 667 (7th Cir. 1997).  In sum, the DEIS shortchanges or omits from its analysis reasonable alternatives that might achieve the Navy's core aim of testing and training while minimizing environmental harm. For these reasons, we urge the Navy to revise its DEIS to adequately inform the public of all reasonable alternatives that would reduce adverse impacts to whales, fish, and other resources. 40 C.F.R. § 1502.1.	Section 1.1 of the EIS identifies that the core of the EIS/OEIS is the development and analysis of different alternatives for achieving the Navy's objectives. Alternatives development is a complex process, particularly in the dynamic context of military training. The touchstone for this process is a set of criteria that respond to the naval readiness mandate as it is implemented in the NWTRC. The criteria for developing and analyzing alternatives to meet these objectives are set forth in Section 2.2.1. This section in 2.2.1, combined with the purpose and need statement in Section 1.4 (along with background information that precedes this statement) adequately justifies the set of alternatives presented in the EIS.
NRDC-82	VII. The Navy Fails to Analyze the Impacts on Wildlife Viewing Interests and Recreation  Just as it fails to consider the direct, indirect, and cumulative impacts of the NWTRC on the region's marine mammals and other fish and wildlife, the DEIS does not adequately consider the NWTRC's effects on wildlife viewing and other wildlife-dependent recreational interests. The DEIS makes no mention of the value lost from the harm to marine mammals that attract a number of our organizational members and members of the public to the potentially affected areas of the Pacific Northwest. Nor does it address the potential economic value lost from decreased tourism, particularly those areas centered on observing whales and other marine mammals in their natural habitats. Neither does it address the effects of increased and low-level flights on backcountry recreation in areas where people fish, hunt, hike, backpack, ski, and test their survival skills in a wild environment.  One of NEPA's explicit purposes is to "assure esthetically and culturally pleasing surroundings," 42 U.S.C. 4331(b)(2), and caselaw makes clear that an agency must adequately consider such recreational impacts in its NEPA analysis. See, e.g., Lujan v. NWF, 497 U.S. 871,887 (1990) ("no doubt that recreational use and aesthetic enjoyment are among the sorts of interests NEPA [was] specifically designed to protect"); LaFlamme v. FERC, 852 F.2d 389, 401 (1988) (because "there were substantial questions raised regarding whether the project may significantly affect recreational use in the project area, and that FERC failed to explain or discuss" these impacts, the court found that "this record reflects a decision which is neither 'fully informed or	These potential impacts were analyzed in the Draft EIS/OEIS in Section 3.14 – Socioeconomics. In short, the proposed activities, largely similar in number and scope to those conducted for years, have not negatively impacted these resource areas in the past nor are they expected to in the future.  Additionally, Section 3.11.2.2 of the Draft EIS/OEIS identified the impacts of low level flights on terrestrial vegetation as well as wildlife under the No Action Alternative and identified only short term behavioral responses in animals, and only individual species affected for both animals and vegetation, with no population level effects. The same is true for the Action Alternatives presented in the EIS.  Any low-level flights over recreational areas has been considered within Socioeconomics – 3.14 and any impacts relating to EO 12898 or EO13045 have been analyzed within Environmental Justice and Protection of Children – 3.15. None of these resource sections show an appreciable effect as a result of low-level flights.

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	well-considered," and therefore concluded the agency's decision not to prepare an EIS was unreasonable).	
NRDC-83	VIII. Project Description and Meaningful Public Disclosure  Disclosure of the specific activities contemplated by the Navy is essential if the NEPA process is to be a meaningful one. See, e.g., LaFlamme v. F.E.R.C., 852 F.2d 389, 398 (9th Cir. 1988) (noting that NEPA's goal is to facilitate "widespread discussion and consideration of the environmental risks and remedies associated with [a proposed action]"). As several groups and individuals identified in their scoping comments, the overall level of detail about the Navy's actions revealed in this process is a far cry from previous EISs and is so general as to undermine the ability to provide meaningful comment. 52	The EIS/OEIS provides a complete and thorough description of the proposed activities.
NRDC-84	With regard to noise-producing activities, for example, the Navy must describe source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impacts on marine life. The DEIS provides some of this information, but it fails to disclose sufficient information about active sonobuoys, acoustic device countermeasures, training targets, or range sources that would be used during the exercises. DEIS at 2-11 to 12. And the DEIS gives no indication of platform speed, pulse length, repetition rate, beam widths, or operating depths-that is, most of the data that the Navy used in modeling acoustic impacts.	To the extent possible, the DEIS presents acoustic source and technical information in Appendix D.
NRDC-85	The Navy-despite repeated requests-has not released or offered to release CASS/GRAB or any of the other modeling systems or functions it used to develop the biological risk f1mction or calculate acoustic harassment and injury. See, e.g., DEIS at Appendix D.	The CASS/GRAB program is export controlled and not available for public release, however, approximate results can be obtained using other mathematical models commonly available to those with the technical expertise to utilize those tools.
NRDC-86	In addition, the DEIS makes repeated reference to a Biological Evaluation ("BE") that the Navy prepared to catalog the effects of its proposed alternatives on species listed as threatened or endangered under the Endangered Species Act. The BE was not included in the DEIS and is not available on the Navy's website. The omission of the BE has severely curtailed the public's ability to meaningfully evaluate and comment upon the effects of the alternatives. The Navy has also ignored repeated Freedom of Information Act requests regarding information and reports cited in the DEIS. These models, reports, and requests for information must be made available to the public, including the independent scientific community, for public comment to be meaningful under NEPA and the Administrative Procedure Act. 40 C. F.R. §§ 1502.9(a), 1503.1(a) (NEPA); 5 U.S.C. § 706(2)(D) (APA). In addition, guidelines adopted under the Data (or Information) Quality Act also require their disclosure. The Office of Management and Budget's guidelines require agencies to provide a "high degree of transparency" precisely "to facilitate reproducibility of such information by qualified third parties" (67 Fed. Reg. 8452, 8460 (Feb. 22, 2002)); and the Defense Department's own data quality guidelines mandate that "influential" scientific material be made reproducible as well. We encourage the Navy to contact us immediately to discuss how to make this critical information available.	The model has been evolving in response to new data and will be subject to independent peer review for conferences or journal submissions. The EIS/OEIS provides all source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impact on marine life unless this information was classified. Based on the information provided in the EIS/OEIS, others with the required technical expertise can use the existing information to calculate similar results. Approximate results can be obtained using other mathematical models commonly available to those with the technical expertise to utilize those tools.  The NEPA requirements were met in the EIS/OEIS. The analysis contained within the Draft EIS/OEIS was complete and fully supported the conclusions. The Biological Evaluation provides information that is specific to the requirements of the regulatory agencies for which it was written.  The BE is not completed yet. Upon completion of consultations and issuance of the Biological Opinions by NMFS and USFWS, the Biological Evaluation will be made available to the public.

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NRDC-87	IX. Scope of Review  We are also concerned about the Navy's understanding of its obligations under applicable law. The Navy indicates that its analysis of "extraterritorial" activities, those activities that would take place outside U.S. territorial waters, was prepared under the authority of Executive Order 12114 rather than under NEPA. See DEIS at ES-6 to 7. Not only is this position on the scope of review inconsistent with the statute (see, e.g., Environmental Defense Fund v. Massey, 968 F.2d 528 (D.C. Cir. 1994) and NRDC v. Navy, No. CV-OI-07781, 2002 WL 32095131 at *9-12 (C.D. Cal. Sept. 19,2002)), but, insofar as it represents a broader policy, it provides further indication that current operations are likewise out of compliance. Most of the area used for sonar training is sited beyond the 12nm territorial boundary, within the U.S. Exclusive Economic Zone. If, as we expect activities currently taking place there have not received their due analysis in a prior environmental impact statement, then the Navy is operating in ongoing violation of NEPA.	This is untrue. NEPA does not apply to actions whose effects occur beyond 12 nm; EO 12114 established the requirement for analysis of these actions. Continuing Navy activity within and beyond the 12 nm limit predates NEPA; only new Proposed Actions and the corresponding decisions on their implementation are subject to NEPA.  The EIS/OEIS has received extensive legal review to ensure that current activities are in compliance with all required Federal, state, and local regulations/laws.
NRDC-88	X. Compliance With Other Applicable Laws  A number of other statutes and conventions are implicated by the proposed activities. Among those that must be disclosed and addressed during the NEPA process are the following:  (1) The Marine Mammal Protection Act ("MMPA"), 16 U.S.C. § 1361 et seq., which requires the Navy to obtain a permit or other authorization from NMFS r the U.S. Fish and Wildlife Service prior to any "take" of marine mamma s. The Navy must apply for an incidental take permit under the MMPA, and NRDC will submit comments regarding the Navy's application to NMFS the appropriate time.	The Navy is fully engaged in the MMPA process with NMFS as described in Chapter 6 of the EIS/OEIS. In September, 2008, NMFS received the Navy's application for the incidental take of marine mammals incidental to Navy training activities in the NWTRC.
NRDC-89	(2) The Endangered Species Act, 16 U.S.C. § 1531 et seq., which requires the Navy to enter into formal consultation with NMFS or the U.S. Fish and Wildlife Service, and receive a legally valid Incidental Take Permit, prior to its "take" of any endangered or threatened marine mammals or other species, including fish, sea turtles, and birds, or its "adverse modification" of critical habitat. See, e.g., 1536(a)(2); Romero-Barcelo v. Brown, 643 F.2d 835 (1st Cir. 1981), rev'd on other grounds, Weinberger v. Romero-Carcelo, 456 U.S. 304, 313 (198). Given the scope and significance of the actions and effects it proposes the Navy must engage in formal consultation with NMFS and the U.S. Fish and Wildlife over the numerous endangered and threatened species in the NWTRC.	The Navy has entered into consultation with both NMFS and U.S. Fish and Wildlife Service on the potential that implementation of the proposed action may affect listed species.
NRDC-90	(3) The Coastal Zone Management Act, and in particular its federal consistency requirements, 16 U.S.C. § 1456(c)(I)(A), which mandate that activities that affect the natural resources of the coastal zone-whether they are located' within or outside the coastal zone"-be carried out "in a manner which is consistent to the maximum extent practicable with the enforceable policies of approve State management programs." The Navy must fulfill its CZMA commitments along the Washington, Oregon and California coasts.	The Navy is in compliance with the CZMA.
NRDC-91	(4) The Magnuson-Stevens Fisheries Conservation and Management Act, 16	The Navy is in compliance with the MSA.

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	U.S.C. § 1801 et seq. ("MSA"), which requires federal agencies to "consult with the Secretary [of Commerce] with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken" that "may adversely affect any essential fish habitat" identified under that Act. 16 U.S.C. § 1855 (b) 2). In turn, the MSA defines essential fish habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." 16 U.S.C. § 1802 (10). The NTWRC contains such habitat. As discussed at length above, anti-submarine warfare exercises alone have the significant potential to adversely affect at least the waters, and possibly the substrate, on which fish in these areas depend. Under the MSA, a thorough consultation is required.	
NRDC-92	(5) The Marine Protection, Research and Sanctuaries Act, 33 U.S.C. § 1401 et seq., which requires federal agencies to consult with the Secretary of Commerce if their actions are "likely to destroy, cause the loss of, or injure any sanctuary resource." 16 U.S.C. § 1434(d)(I). Since the Navy's exercises would cause injury and mortality of species, consultation is clearly required if sonar use take place either within or in the vicinity of the sanctuary or otherwise affects its resources. Since sonar may impact sanctuary resources even when operated outside its bounds, the Navy should indicate how close it presently operates or foreseeably plans to operate, to such sanctuary and consult with the Secretary of Commerce as required.  In addition, the Sanctuaries Act is intended to "prevent or strictly limit the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities" (33 U.S.C. § 1401(b)), and prohibits all persons, including Federal agencies, from dumping materials into ocean waters, except as authorized by the Environmental Protection Agency. 33 U.S.C. §§ 1411, 1412(a). The Navy has not indicated its intent to seek a permit under the statute.	The Navy is in Compliance with the Sanctuaries Act.  The Navy's activities are not expected to destroy, cause the loss of, or injure of any sanctuary resource.
NRDC-93	(6) The Migratory Bird Treaty Act, 16 U.S.C. § 703 et seq. ("MBTA"), which makes it illegal for any person, including any agency of the Federal government, "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory birds except as permitted by regulation. 16 U.S.C. § 703. After the District Court for the D.C. Circuit held that naval training exercises that incidentally take migratory birds without a permit violate the MBTA, (see <i>Center for Biological Diversity</i> v. <i>Pirie</i> , 191 F. Supp. 2d 161 (D.D.C. 2002) (later vacated as moot)), Congress exempted some military readiness activities from the MBTA but also placed a duty on the Defense Department to minimize harms to seabirds. Under the new law, the Secretary of Defense, "shall, in consultation with the Secretary of the Interior, identify measures (1) to minimize and mitigate, to the extent practicable, any adverse impacts of authorized military readiness activities on affected species of migratory birds; and (2) to monitor the impacts of such military readiness activities on affected species of migratory birds." Pub.L. 107-314, § 315 (Dec. 2, 2002). As the Navy acknowledges, migratory birds occur within the NWTRC. The Navy must therefore consult with the Secretary of the Interior regarding measures to minimize and monitor the effects of the	Implementation of the alternatives including the Proposed Action would not have a significant impact on any population of migratory birds, would comply with the MBTA, and would not require a permit under the MBTA.

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	proposed range on migratory birds, as required.	
NRDC-94	(7) Executive Order 13158, which sets forth protections for marine protected areas ("MPAs") nationwide. The Executive Order defines MPAs broadly to include "any area, of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." E.O. 13158 (May 26, 2000. It then requires that "[e]ach Federal agency whose actions affect the natural cultural resources that are protected by an MPA shall identify such actions," and that, "[t]o the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA." <i>Id.</i> The Navy must the therefore consider and, to the maximum extent practicable, must avoid harm to he resources of all federally- and state-designated marine protected areas.	The Navy will follow the guidelines of EO 13158.
NRDC-95	The proposed activities also implicate the Clean Air Act and Clean Water Act as well as other statutes protecting the public health. The Navy must comply with these and other laws.	The Navy complies with these and other laws.
NRDC-96	XI. Conflicts with Federal, State and Local Land-Use Planning NEPA requires agencies to assess possible conflicts that their projects might have with the objectives of federal, regional, state, and local land-use plans, policies, and controls. 40 C.F.R. § 150 .16(c). The Navy's training and testing activities may affect resources in the coastal zone and within other state and local jurisdictions, in conflict with the purpose and intent of those areas. The consistency of Navy operations with these land-use policies must receive more thorough consideration.	The Navy is in compliance with the CZMA.
NRDC-97	XII. Conclusion For the reasons set forth above, we urge the Navy to satisfy its obligations under NEPA and other applicable laws. To that end, the Navy should revise its DEIS, improving its impacts and alternatives analysis and establishing temporal and geographic protection zones to mitigate the harmful impacts of its training.	The Draft EIS/OEIS fully meets the requirements of NEPA. In response to public comments, some revisions have been made as reflected in this Final EIS/OEIS.
NRDC-98	On behalf of the Natural Resources Defense Council ("NRDC") and our 1.2 million members and activists, I appreciate the opportunity to submit these additional comments regarding the Navy's Draft Environmental Impact Statement/Overseas Environmental Impact Statement ("DEIS") for the Northwest Training Range Complex ("NWTRC"). These comments supplement the comment letter submitted by NRDC and other groups on March 10, 2009. Please include these comments in the administrative record. Our last comment letter detailed an incident in Haro Strait in May 2003 when the U.S. Navy vessel USS Shoup conducted a mid-frequency sonar exercise while passing between Washington's San Juan Islands and Canada's Vancouver Island. According to one contemporaneous account, "[d]ozens of porpoises and killer whales seemed to stampede all at once in response to a loud electronic noise echoing through" the Strait. Several field biologists	The full account of the Haro Strait sonar incident is included in Appendix E.  The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.  The use of sonar described in the comment involved the use of sonar for safety of navigation, not for training purposes.

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	present at the scene reported observing a pod of endangered Southern Resident killer whales bunching near shore and engaging in very abnormal behavior consistent with avoidance, a minke whale "porpoising" away from the sonar ship, and Dall's porpoises fleeing the vessel in large numbers. Eleven harbor porpoises-an abnormally high number given the average stranding rate of six per year-were found beached in the area of the exercise. The danger of this incident has not passed, as demonstrated by the Navy's recent use of sonar in the Strait of Juan de Fuca from approximately 7 pm April 7 to 3 am April 8, 2009. Hydrophones on San Juan Island, operated by The Whale Museum, picked up strong sonar pings and garbled voices in Haro Strait from what the Navy later confirmed to be a submarine and surface ship. The received levels of sonar were approximately the same as those levels that caused the 2003 Haro Strait incident. Once again, Dall's porpoises engaged in unusual behavior consistent with avoidance. According to one contemporaneous account, at around 7:30 pm, about 10 to 20 Dall's porpoises started "swimming in circles and frequently surfacing." They disappeared for 5 to 10 minutes and then engaged in the same abnormal behavior.  This most recent incident involving the Navy's use of sonar in the Strait of Juan de Fuca belies the Navy's claims that impacts of its sonar will be minimal and short-term in nature because the "high platform speeds" of its vessels make it unlikely that animals could keep pace with the vessels. See, e.g., DEIS at 3.9-101 to 102. To the contrary, hydrophones picked up high levels of sonar in the same area for over 8 hours, thus exposing marine mammals to high-frequency sonar for a prolonged period of time.  The Navy's recent use of sonar in the Strait of Juan de Fuca highlights the Navy's reckless disregard of the harmful impacts of its high intensity sonar, as well as the Navy's inability to recognize - and learn from - its past mistakes. It also underscores the need for the Navy to finall	Response Text
NRDC-99	Appendix A – Recommendations for Marine Protection Zones in the Northwest Training Range Complex	The Navy's consideration of protection zones were described in Section 5.2.1.5 of the Draft EIS/OEIS.
NRDC-100	Appendix B – Impacts of Sonar	The issues addressed in this Appendix were responded to directly within the NRDC comments above.
NRDC-101	Appendix C – CRITIQUE OF THE RISK ASSESSMENT MODEL EMPLOYED TO CALCULATE TAKES IN THE HAWAII RANGE COMPLEX SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT David E. Bain, Ph.D.	This appendix is addressed above as the stand-alone comment - "Bain."
Nelson-01	I wanted to let you know that I just can't bear the thought of what destruction would happen if the Navy would bomb our beautiful coast and use it as a	This comment has been duly noted.

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	practice range thus killing and toxifying so much precious sea life each time in what you call "acceptable kills". There are no longer acceptable kills in a long-suffering ocean where over fishing, pollution, destruction of coral reefs has already put it in a dire state of suffering. I don't think this is a good idea in this world on the edge of global warming.	
	I also can't bear the agony to our migrating fellow beings –the whales and cetations who navigate with their own sonar along our coast and would suffer horribly with their sensitive ears to this sonar sound barrage.	
Nelson-02	I don't like the aspect of not having a timetable-an end point for this activity either.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Nelson-03	I don't accept the injury of the biggest upwelling of nutrients in the world that feeds the denizens of the sea being polluted, attacked, bombed, and sonared.	Neither the Navy nor the National Marine Fisheries Service predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS. Neither are their any expected significant impacts to any species in the NWTRC.
Nelson-04	Our local economy relies on the quiet beauty of this precious resource as well and the local fisherman have already lost their salmon fishing jobs because of the massive destruction of the salmonid populations. Our local seaweed harvesters make their living from the cleanness of our high-quality seaweed we want them to be able to provide it.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS.
	For these and other serious reasons, I beg you not to use our coast on the Northwest for any more testing.	
	I write in response to information that the Navy is planning Weapons Testing in the waters off the coast of Northern California.  I understand the need to be the best in the world in the ability to provide the latest and most effective weapons available in these troubled times. Surely there must be a better way to test these implements using computer models or small scale container tank tests, or whatever the latest in science may	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Norling-01	provide. However it has been shown time and again that sonar and weapons testing damages marine life and kills marine animals.  The Northern California coastline is unique in that it is only one of a few areas in the world that has a deep ocean up swell that provides rich nutrients for marine life. This may be sorely damaged by weapons testing. It is also the main migratory route for whales. It is birthing grounds for hundreds of seals and sea lions.	
	Please find another way to do your testing, or at worst, go out into the middle of the ocean to do your testing. The arrogance of humans must not assume that we have the right to destroy fragile environments for short term reasons of our perceived benefit.	
Oberweiser-01	The pollution and environmental damage to the ocean ecosystem that will be done by this proposed "defense" training exercise are absolutely unacceptable to us who live on the coast. Destroying the environment to achieve full spectrum dominance by the United States government is absolutely unacceptable.	This comment has been duly noted.

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Oberweiser-02	I'm extremely concerned about the disruption of the migration of the Gray whales and the harm that will be done by all the sonar that the Navy will be using. There are numerous studies and reports showing harm to marine mammals and fish by low and medium frequency sonar use.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Oberweiser-03	I am also deeply disturbed by hazardous substances like white phosphorous, depleted uranium, fulminate of mercury, lead perchlorate and ammonia that will be released into the ocean. The ocean is where the majority of the Earth's oxygen comes from. We are using the ocean as a sewer. We are destroying its web of life.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Other potentially hazardous materials were analyzed in Section 3.3 of the Draft EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Ocean Protection Coalition (OPC)-01	The Ocean Protection Coalition is a 501(c)3 group of citizens and other groups dedicated to protecting the Mendocino County coast and ocean and its many resources. We are compelled to such efforts because we recognize that we are blessed with one of the four most productive marine ecosystems In the world. We know the ocean Is our greatest asset. The well-being of the ocean effects every aspect of our lives.  Currently we are resisting plans to install hydrokinetic power plants off our coasts well as renewed efforts to open up our outer continental shelf to oil & gas development.  Because we have only recently learned of the Navy's plans to expand their on-going military exercises and weapons tests we have yet had a chance to access the EIS/OEIS for this proposal. We therefore must rely on other reliable sources for our comments. We incorporate into the record the following comments already submitted. We concur with and reiterate the author's concerns	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
OPC-02	We are especially concerned regarding the following: The apparent lack of adequate notice & hearings Inadequate information re what the Navy actually plans and therefore the public's inability to assess potential impacts	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
OPC-03	The use of "depleted" uranium which we understand still emits significant amounts of radioactivity.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to

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		public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment.
OPC-04	Could the past use of "depleted" uranium be causing dead zones recently discovered off the Oregon coast? If not, on what does the Navy base its findings?	There is no evidence that depleted uranium use or any of the Navy's current or proposed activities contribute to "dead zones." "Dead zones" are caused by excessive nutrient pollution (i.e. nitrogen) that initially, radically changes the algae density of an area. Excessive algae blooms, eats up all the O2, and then dies – leaving an O2 depleted area that supports little or no marine life (until significant mixing occurs). Dead zones are generally associated with agricultural runoff and pollution.
OPC-05	Sonic weapons tests known to be harmful to marine animals	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
OPC-06	The potential cumulative impacts of Navy activities when combined with ocean energy extraction activities (were these even mentioned?)	The cumulative impacts were analyzed in Chapter 4 of the Draft EIS/OEIS.
OPC-07	Potential negative impacts to listed species such as the gray whale, salmonon which a considerable portion of our local income depends.	Potential impacts to marine mammals were analyzed in Section 3.9, impacts to fish in Section 3.7.
OPC-08	Potential negative impacts to phytoplankton-the base of the food chain.  We are experiencing a global emergency unprecedented in the history of humankind. Climate change caused by global warming threatens not just the national security of the United States, but of all nations. Indeed, it is the biggest threat to all life on the planet.	Potential impacts to marine plants and invertebrates were analyzed in Section 3.6 of the Draft EIS/OEIS.
OPC-09	The ocean has the greatest potential to ameliorate the effects of global warming. Every component of the ocean ecosystem plays its part in the delicate balance that allows life to flourish on Earth. But the ocean is already severely stressed and reaching its limits on its ability to continue doing its Job. We need to immediately stop all activities that compromise the ocean's ability to function as the most important element in the planet's life support system. We need to find ways of bringing its processes back into balance.	The Navy's focus is dictated by its Federal law mandate (Title 10 U.S. Code § 5062). Any change to that mandate go well beyond the scope of this EIS/OEIS.
	The military, burning, as it does, one third of the fossil fuels consumed in this country, needs, as do the rest of us, to drastically curtail its use of non-renewable energy. Additionally, if the Navy and the rest of the "Defense" Department are sincerely interested in protecting the people of the US, their focus needs to shift from seeing enemies from beyond our borders. We all need to acknowledge the only threat to our security is climate change. The	

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	military has enormous resources that could perhaps make the difference between a planetary nightmare and survival.	
	If this Navy plan is not contributing to this effort, then the only rational decision must be for a "no project" alternative.	
	[Van Strum letter of February 15 attached and transcribed below under Van Strum.]	
Office of National Marine Sanctuaries	[In reference to p. ES-13]	A definition of offshore area and inshore area have been added to the Executive Summary on p. ES-1
(ONMS)-01	The Executive Summary lacks and needs a simple definition of offshore and inshore areas prior to use of these terms under resource analyses.	Exceeding on p. 20 1
ONMS-02	[In reference to p. ES-13] The statement that OPAREAS outside state jurisdiction are not within the air quality jurisdiction of the Federal government is questioned. Does not EPA have authority offshore from state waters?	For the purposes of Clean Air Act Conformity, the Clean Air Act is typically applicable within 3 miles of the nearest shoreline. Outer Continental Shelf (OCS) regulations do apply to stationary sources located offshore (such as oil and gas platforms and operations) within 200 nm from shore, but these regulations apply to specific sources that are regulated under the OCS regulations only. Navy operations are not regulated under the OCS regulations.
	[In reference to p. ES-15]	EMATTs sink after they have completed their run, so would not be a
ONMS-03	Floating nonhazardous expended materials are a concern for ONMS and are not addressed in Table ES-5. For example, EMATT (expendable targets) should be included in this table.	floating concern. Nearly all of the Navy's expended materials sink quickly after their use. Exceptions are either extremely small (see chaff discussion in Section 3.3.2.2 of the Final EIS/OEIS) or are recovered by the Navy.
	[In reference to p. 2-31]	No response required.
ONMS-04	Based on concerns for accumulation of debris on the seafloor, the ONMS appreciates that the Navy will not install the small scale underwater training minefield within the sanctuary.	
	[In reference to p. 2-36]	HE (high explosive) has been added to the list of acronyms, and is now
ONMS-05	Acronym "HE" is not defined in document. It is used in several places (Tables 3.3-1, 3.3-9 and more).	defined in first use on Table 2-10, and in Section 3.3.
	[In reference to Tables 3.3-12, 25, and 30]	EMATTs are not recovered. The text has been corrected.
ONMS-06	These tables indicate EMATTs are not recovered but text below indicates they are "usually retrieved." Text on p. 3.7-40 clearly states that EMATTs are not recovered. This requires clarification.	
ONMS-07	In addition, disposal of non-biodegradable targets in Olympic Coast National Marine Sanctuary (OCNMS) is in violation of OCNMS regulations. Under separate cover, the ONMS has requested that the Navy consult with sanctuary staff on how his activity can be modified to minimize or eliminate	The Navy does not dispose of items in the OCNMS. Some materials are expended as part of their intended use as targets. Because these activities are the continuation of previously approved activities within the OCNMS, no consultation is required.
	this marine debris concern.	All Navy activities are carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities.
ONMS-08	[In reference to Tables 3.3-12, 25, and 30]	All tables are for a one year time frame. These have been corrected
	This and other tables - the time frame needs to be defined - are 121 EMATTs	throughout the Final EIS/OEIS.

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	and one sunken vessel <i>per year</i> anticipated under No Action?	
ONMS-09	[In reference to p. 3.4-7] The statement about oxygen levels "below the surface" of near 0.5 mL/L is not accurate. It should refer either to some location within the water column or sediment but this is not clear. The range provided may refer to nearbottom oxygen levels, in which case it is should be qualified with "generally." Mid water oxygen levels (most of the area under consideration) varies widely, but is generally between 1 and 7 mL/L. Example data (with mg/L to mL/L conversion by dividing mg/L by 1.4) is available at http://olympiccoast.noaa.gov/research/ongoing/hypoxia.html .	The text has been revised to more accurately represent the oxygen levels below the surface.
ONMS-10	[In reference to p. 3.4-19, Table 3.4-1] Waste discharge restrictions for Navy vessels are not consistent with Olympic Coast National Marine Sanctuary regulations that prohibit "untreated" sewage and non-plastic garbage discharge into sanctuary waters. Sanctuary regulations (15 CFR §922.152(a)(2)(i)) should be acknowledged in the DEIS and in Navy waste discharge protocols. See also Table 5-1 in the DEIS.	Table 3.4-1 from the Draft EIS/OEIS did not detail all restrictions to discharge. The source for the information in this table is found in OPNAVINST 5090.1C (DoN 2007). This instruction also states that National Marine Sanctuaries (which includes the Olympic Coast National Marine Sanctuary) are prohibited discharge zones for U.S. Navy shipboard wastes. The text in the Final EIS/OEIS in which this table is referenced has been revised to clarify this important restriction.
ONMS-11	[In reference to p. 3.6-2] The statement re: deep sea coral communities should read "Recent studies" because several are cited, and the references provided address different areas of the shelf.	The text has been corrected.
ONMS-12	[In reference to p. 3.7-40] There is inconsistency in text related to recovery of EMATTs (see comment on page 3.3-18)	The text has been corrected to reflect that EMATTs are <u>not</u> recovered.
ONMS-13	[In reference to p. 5-13] We are pleased to see the mitigation measure "Vessels will expedite the recovery of any parachute deploying aerial targets to reduce the potential for entanglement of marine mammals and sea turtles." This language could more clearly give directive to operations that parachute recovery will be attempted.	The language as written is adequate to inform the public of procedures taken by the Navy.
ONMS-14	[In reference to p. 6-3, Table 6-1] This table should include the prohibition on bombing within Olympic Coast National Marine Sanctuary regulations but this part of the regulations is not included [922.152(d)(2)]	The table quotes the regulation that states the exception of bombing. In addition, a new section has been added in Chapter 6 (6.1.2) that includes a new table clearly showing that bombing is not conducted in the OCNMS.
ONMS-15	[February 12 Letter] The NOAA Office of National Marine Sanctuaries (ONMS) acknowledges the effort the Navy has applied to development of the Draft EIS/OIS dated December 2008 for the Northwest Training Range Complex. We also appreciate the time Navy representatives have spent briefing Olympic Coast National Marine Sanctuary (OCNMS) staff and advisory council on elements of the DEIS. We have submitted detailed comments on specific language in the DEIS via the National Marine Fisheries Service, the cooperating agency	The Navy does not expect its actions as likely to destroy, cause the loss of, or injure a sanctuary resource.  A new section in the Final EIS/OEIS has been added to better explain how the proposed activities are exempted from OCNMS prohibitions. Please see Section 6.1.2. The analysis shows no adverse impacts to sanctuary resources.  Because the Navy's proposed activities that would take place in the OCNMS are specifically allowed, consultation with NOAA for these

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	on the analysis.	activities is not required.
	Section 304(d) the National Marine Sanctuaries Act (NMSA; 16 U.S.C. §§ 1431 et. seq.) requires federal agencies whose actions are "likely to destroy, cause the loss of, or injure a sanctuary resource" to consult with the ONMS before taking the action. The office is, in these cases, required to recommend reasonable and prudent alternatives to protect sanctuary resources. Although the DEIS determined that Federal interagency consultation pursuant to section 304(d) of the NMSA was not necessary because the proposed action does not include new activities, (page 1-13), the DEIS does identify activities that may injure sanctuary resources and does identify potential new activities and equipment in the preferred alternative. New activities may be exempted only after consultation with ONMS. 15 CFR §922.152(d)(I)(ii). In addition, while some of these practices may be consistent with the exemptions in OCNMS regulations for certain Department of Defense activities, these regulations further specify that all military activities shall be carried out in a manner that avoids to the extent practicable any adverse impacts to sanctuary resources. 15 CFR §922.152(d)(I).	
	Therefore, ONMS requests consultation with the Navy due to the potential impacts of the proposed activities on sanctuary resources, especially for activities that are substantially different or otherwise fall outside the scope of military operations considered by analyses made when the sanctuary was designated.	
ONMS-16	ONMS is particularly concerned about the impacts on sanctuary resources from the following:  1. The extensive use of expendable equipment that would result in marine debris being deposited into OCNMS, in particular sonobuoys, parachutes, and various targets. Discharge of material or other matter, as well as abandonment of equipment on the seabed, are both prohibited by OCNMS regulations. See generally, 15 CFR §922.152. ONMS would like to discuss with the Navy measures to reduce the amount of debris, including exploring the use of biodegradable materials and retrieving material whenever practicable.	The materials described in this comment are all products of conducting anti-submarine warfare training in the OCNMS, an activity specifically authorized under OCNMS regulations (15 CFR §922.152(d)(1)(iv). The Navy will continue to use more environmentally friendly materials as technology evolves.
ONMS -17	Waste discharge protocols that are less stringent than OCNMS regulations. OCNMS discharge regulations are more restrictive than the standard operating protocols described in the DEIS. See 15 CFR §922.152(a)(2)(i). ONMS requests consultation on waste discharges associated with Navy vessel operations during training activities within OCNMS to make them consistent with sanctuary regulations.  I believe that these issues can be addressed in a manner that meets the goals and objectives of both the Navy and the ONMS. I recommend that, at the earliest opportunity, the Navy initiate constitution with us to discuss ways.	National Marine Sanctuaries (which includes the Olympic Coast National Marine Sanctuary) are prohibited discharge zones for U.S. Navy shipboard wastes. The text in the Final EIS/OEIS has been revised to clarify this important restriction.
	the Navy can address these concerns, including improvements that can be made to the Navy's operating procedures and the development of measures necessary to protect sanctuary resources to the maximum extent practicable.	

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	Please contact me at your convenience to set up further discussions and	
	continue the consultation process.	
	I can be reached by phone at 360-457-6622 ext. 11 or by email at	
	carol.bernthal@noaa.gov.	
	[February 5 Letter]	No response required.
Olympic Coast	On behalf of the Olympic Coast National Marine Sanctuary Advisory Council (council), I am forwarding to you the council's comments on the Draft Environmental Impact Statement (DEIS) for the U.S. Navy Northwest Training Complex Environmental Impact Statement/Overseas. The council considered and adopted these comments unanimously with no abstentions at the January 30th meeting held in Forks, Washington. By the council's legislative requirements and the requirements of its charter, the council directs recommendations on issues affecting the sanctuary by other federal agencies to the sanctuary superintendent.	
National Marine Sanctuary (OCNMS) -01	In September of 2007, the council submitted comments on the scope of issues to be included in the DEIS. These are included as an attachment. In addition, the Olympic Coast National Marine Sanctuary will be submitting its own comments on the DEIS.	
	In forwarding these comments, I want to state that the views represented in the council's letter represent the council views only and do not necessarily represent the views of the Olympic Coast National Marine Sanctuary or the National Marine Sanctuary Program of the National Oceanic and Atmospheric Administration. If you have any questions, please Contact me and, if necessary, I will connect you with the appropriate council member.	
	Also, please address any responses directly to the council.	
	[Sanctuary Advisory Council comments attached]	
	[January 30, 2009 Letter]	The Draft EIS/OEIS included an analysis of impacts under a No Action
	Dear Superintendent Bernthal:	Alternative. The No Action Alternative, if chosen, would limit activities throughout the range complex, including the Olympic Coast National
	The Olympic Coast National Marine Sanctuary Advisory Council (council) approved this letter at its January 29, 2009 meeting recommending that you forward to the U.S. Navy the following comments on the U.S. Navy Northwest Training Range Complex Draft EIS/OEIS (DEIS).	Marine Sanctuary, to current levels.  The Navy will consider all potential impacts as described in the Final EIS/OEIS before a decision is made. Your input in identifying these
	1. In prior scoping comments (see attachment), the council recommended that the Navy consider alternatives that would maintain the levels of activity and equipment within the sanctuary boundaries as they existed in 1994 and 2004. The DEIS does not consider this recommendation. Rather, both Alternatives 1 and 2 in the DEIS treat sanctuary waters no differently than the rest of the Northwest Training Range Complex, except for the location of the underwater minefield.	specific potential impacts is helpful.  Due to the dynamic environment in which the Navy trains in the NWTRC, the Navy cannot predict precisely where, within the range complex, that training will take place.
	2. The council recommends that the Navy adopt the No Action alternative in the DEIS. Both Alternatives 1 and 2 anticipate an increased level of ship and aircraft activities over the W237 military warning area. This would result in increased risks of wildlife disturbance, marine debris, and hazardous	

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	materials contamination, causing environmental impacts on sanctuary resources. Because the DEIS does not quantify the increase of military activities in the sanctuary, it is difficult to quantitatively assess the increased environmental risks. Therefore, based on a precautionary approach, the council prefers the No Action alternative.	
	3. The council supports the Navy's decision to prevent underwater minefield installation from taking place in the sanctuary, as proposed in the DEIS.	
	The council is an advisory body. The opinions and findings of this publication do not necessarily reflect the position of the Olympic Coast National Marine	
	Sanctuary and the National Oceanic and Atmospheric Administration.	
	September 27, 2007 Letter	Responses provided to specific comments.
	Dear Ms. Benthal	
	On behalf of the Olympic Coast National Marine Sanctuary Advisory Committee I am forwarding to you scoping comments on the U.S. Navy Northwest Training Complex Environmental Impact Statement/Overseas Environmental Impact Statement that were adopted by the Olympic Coast National Marine Sanctuary Advisory Council (OCNMSAC) at our September 21, 2007 meeting. Also on behalf of the OCNMSAC, I am requesting that you forward these comments to the U.S. Navy.	
	With regard to public scoping for the Northwest Training Range Complex EIS, the Sanctuary Council adopted the following resolution with no objections and one abstention at its regular meeting of September 21, 2007:	
OCNMS-02	"The Sanctuary Council respectfully requests that the Navy perform a broader analysis of alternatives within the geographic area of the Olympic Coast National Marine Sanctuary. Specifically, we request that the Navy consider alternatives that would 1) maintain activity and equipment levels within the Sanctuary as specified in the Environmental Impact Statement pertaining to Sanctuary designation in 1994; and 2) maintain activity and equipment levels equivalent to those that existed in 2004.	
	The Sanctuary Council further requests that the Navy address the 13 concerns that the Advisory Council submitted in response to public scoping for the Keyport Range expansion as articulated in a letter dated December 2, 2003 (enclosed). The same concerns apply to scoping for the Northwest Training Range Complex."	
	The OCNMSAC is an advisory body only. The opinions and findings of this publication do not necessarily reflect the position of the National Marine Sanctuary Program and the National Oceanic and Atmospheric Administration.	
	Sincerely,	
	Terry Klinger, Chair	
Orca Network (Orca)-01	We appreciate the opportunity to read the NWTRC Draft Environmental Impact Statement and offer comment. The activities of Orca Network lie primarily in disseminating the natural history of orcas, especially those in the Pacific NW, and by extension all marine mammals. We are also active in	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could

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	studies to determine critical habitat needs for the survival of marine mammals, especially endangered orcas and their primary prey, Chinook salmon runs, many of which are also endangered or threatened.	be submitted by mail postmarked no later than the closing date.
	A. A further extension of the comment period, to at least mid-April, is needed on grounds that the requirement to provide adequate public notice has not been met throughout the process of this EIS, beginning in 2007. [Note: On March 10, the comment period was extended to April 13.]	
Orca-02	In Oregon, for example, (as documented here: http://planetwaves.net/pagetwo/2009/02/02/navy-plan-turnst-pacific-coast-into-firingrange/) the Navy apparently attempted to evade the purpose of the public notice requirement, which is to inform the public of potential environmental impacts and allow ample time for comment.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Orca-03	In addition, the website to submit comments was non-functional during more than half of the original comment period. The Navy's principal mechanism for public information and input about the EIS, their website: (www.nwtrangecomplexeis.com/EIS.aspx), was seriously compromised between the Dec. 29, 08 inception of the EIS Public Response Period and Jan. 21. Attempts to make comments via the website were not allowed due to "abort issue" (Navy's term) from Dec 29 until Jan. 20. The website was not accessible whatsoever between Jan 15 and Jan 21. This represents a breach of process established by the Navy.  We appreciate the two extensions of comment period granted to date, however given the high potential for environmental, marine mammal and human harm resulting from the expanded training, we respectfully request a	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Orca-04	B. Due to the decline in numerous bird, fish and marine mammal species that inhabit the proposed training range, and the lack of information available to assess the impacts of the Navy's proposed expansion on those species, especially with proposed testing of new systems and the impossibility of achieving adequate marine mammal monitoring, a "No Action Alternative" which maintains the current level of training, is the preferred option. The EIS states that:  No significant impacts are identified for any resource area in any geographic location within the NWTRC Study Area that cannot be mitigated, with the exception of exposure of marine mammals to underwater sound.  indicates the Navy is aware that even the most effective mitigation measures will probably fail to protect marine mammals.	The mitigation measures proposed by the Navy, in coordination with the National Marine Fisheries Service, are expected to successfully mitigate harm to marine species. The mitigation measures are not designed to completely eliminate all anthropogenic sound that could reach all marine mammals. Received levels of Navy-produced sound would still reach marine mammals at low levels that could affect behavior.  The Navy anticipates on serious injury or death to any marine mammals due to Navy activities in the NWTRC.
Orca-05	C. Prior to supporting any expansion of training activities the Navy needs to fund independent research on the seasonal presence of marine fish, birds and mammals found within their training ranges.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Orca-06	D. The Navy's analysis fails to account for cumulative impacts for the years of	The Navy fully acknowledges the potential for behavioral impacts. Based

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	anticipated activity. According to the Acoustic Institute (http://www.acousticecology.org/docs/AEI_OceanNoise2008.pdf): "Behavioral impacts clearly replaced strandings and deaths as the key issue for marine mammals encountering human noise. Several studies released during 2008 all suggest that whales of many species may stop or reduce their feeding when loud human sounds enter their habitat, and this particular impact is likely to become a central focus of future research and regulatory consideration." AEI further states: "All parties seem to be accepting that gross injury is rare to the point of being difficult to use as a lever to shift the balance of interests with the Navy's national security imperative, but NGOs, many field researchers, and agency staff are all looking more closely at the behavioral impacts that take place at much longer ranges (up to several or even tens of kilometers)."	on the latest, accepted science available, the Navy included "behavioral" exposures to Navy-produced sound in Section 3.9.2.1 of the Draft EIS/OEIS, starting on p. 3.9-57.  Stated as the "Behavioral" or "Risk Function" exposures, acoustic modeling estimates are provided on Tables 3.9-11 and 3.9-12 (for the Preferred Alternative).
Orca-07	E. The Navy needs to demonstrate a means to respond to environmental consequences of a maritime incident in all their operating areas including interactions between their ships and commercial vessels.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Orca-08	F. The EIS inadequately describes the quantities and ecological effects of discarded metals and chemicals, including depleted uranium and the potential for oil spills or ship collisions. The EIS states:  Materials expended during training include sonobuoys; parachutes and nylon cord; towed, stationary, and remote-controlled targets; inert ordnance; unexploded ordnance, and fragments from exploded ordnance, including missiles, bombs, and shells. Materials include a variety of plastics, metals, and batteries.  The reassurance that:  Most of these materials are inert and dense, and will settle to the bottom where they will eventually be covered with sediment or encrusted by physical or biological processes.	The complete analysis of the potential impacts of expended materials on a given resource is provided throughout the Draft EIS/OEIS, from Section 3.3 to 3.16.  The cumulative impacts were analyzed in Chapter 4 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in
	seems to gloss over cumulative effects of disposal at sea of unpredictable quantities of unknown substances into the water column and ocean floor.  G. In our judgment the mitigation measures detailed in this EIS are not sufficient to reliably identify the presence of cetaceans in most instances, in part because the marine mammals themselves often attempt to avoid detection by other marine mammals. Organ Network has been involved in	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals,
Orca-09	detection by other marine mammals. Orca Network has been involved in observing and researching several species of cetaceans for decades, and we are well acquainted with the difficulty of recognizing brief sightings or faint acoustic signals. Recognition of marine mammals at sea either by sight or by sound is often highly problematic even for experienced personnel in calm conditions. The mitigation measures presented in the EIS appear to be as thorough as possible and, if carried out, seem to provide the best effort to monitor for marine mammals, at no small expense and commitment of resources. In real conditions, however, marine mammals can travel in a manner intended to be undetectable. Transient orcas, for example, are adept	hachic Northwest with no recorded evidence of narm to marine maminals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained

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	at evading detection by their wary prey or other orcas, or humans. Other marine mammals often attempt to avoid being noticed by transient killer whales. Additionally, many species of large cetaceans are capable of remaining below the surface for more than an hour and travelling a mile or more in silence.	lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Orca-10	The Natural Resources Defense Council reports that twenty-nine species of marine mammals occur in the Olympic Coast National Marine Sanctuary alone, which is a small segment of the proposed extension, including eight threatened or endangered species of whales, otters and pinnipeds. The sanctuary provides important regular foraging habitat for humpback and killer whales, including the endangered Southern Resident orca population. Gray whales use the sanctuary during biannual migrations between calving and feeding areas, and a small, possibly distinct, group of gray whales known as "summer residents" use areas along the Oregon and Washington coasts for feeding every summer. Additional cetacean species that have been observed in the waters of the sanctuary include: minke whales, fin whales, sei whales, sperm and pygmy sperm whales, blue whales, Hubb's beaked whale, Cuvier's beaked whale, Baird's beaked whale, Stejneger's beaked whale, Risso's dolphin, false killer whale, common dolphin, northern right whale dolphin, Pacific white-sided dolphin, Dall's porpoise, and harbor porpoise. Sea otters, Steller and California sea lions, harbor seals and elephant seals use near-shore areas within the sanctuary, haul out on land at a number of locations along the coast, and use deeper waters for foraging.	Section 3.9 of the Draft EIS/OEIS contains the analysis of all of the occurring marine mammals in the NWTRC.
Orca-11	H. The Navy must also consider the full effects of its sonar training. Lethal injuries in the form of abrasions to ears and lungs or trauma triggering surfacing in panic, causing lethal injuries, can occur, but sub-lethal injuries such as loss of hearing or orientation may effect behavioral changes that can also be long-term in nature and result in reduced survival. Injurious effects can harm individuals or populations, especially through repeated activity.	The Navy considered all potential effects of sonar on marine mammals in Section 3.9 of the Draft EIS/OEIS.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Orca-12	I. In addition to sonars, a wide variety of explosives will be detonated in course of trainings. The physical effects of explosions are inherently more difficult than sonars to predict, but may be lethal at some ranges equally difficult to predict and complicated by inclement weather, currents and thermoclines, species and behavior of animal in question, etc. The IES also states:  Aircraft with deployed sonobuoys will use only the passive capability of sonobuoys when marine mammals are detected within 200 yds (183 m) of the sonobuoy.	The Navy considered all potential effects of explosives on marine mammals in Section 3.9 of the Draft EIS/OEIS.

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	For the NWTRC there are three types of explosive sources: AN/SSQ-110 Extended Echo Ranging (EER) sonobuoys, demolition charges, and munitions (MK-48 torpedo, Maverick, Harpoon, HARM, HELLFIRE and SLAM missiles, MK-82, MK-83, MK-84, GBU-10, GBU-12 and GBU-16 bombs, 5-inch rounds and 76 mm gunnery rounds). The EER source can be detonated at several depths within the water column. For this analysis a relatively shallow depth of 20 meters is used to optimize the likelihood of the source being positioned in a surface duct. Demolition charges are typically modeled as detonating near the bottom. For a SINKEX the demolition charge would be on the hull. The MK-48 detonates immediately below the hull of its target (nominally 50 feet). A source depth of 2 meters is used for bombs and missiles that do not strike their target. For the gunnery rounds, a source depth of 1 foot is used. The NEWs for these sources are as follows:	
	• EER Source—5 pounds • Demolition charge—10 pounds in Explosive Ordnance Disposal (EOD), 100 pounds in a sinking exercise (SINKEX) • MK-48—851 pounds • Maverick—78.5 pounds • Harpoon—448 pounds • HARM—41.6 pounds • HELLFIRE—16.4 pounds • SLAM—164.25 pounds • MK-82—238 pounds • GBU-10—945 pounds • GBU-12—238 pounds • GBU-16—445 pounds • 5-inch rounds—9.54 pounds • 76 mm rounds—1.6 pounds	
	The exposures expected to result from these sources are computed on a per in-water explosive basis. The cumulative effect of a series of explosives can often be derived by simple addition if the detonations are spaced widely in time or space, allowing for sufficient animal movements as to ensure a different population of animals is considered for each detonation.  and  Modeling impact volumes for explosive sources span requires the same type of TL data as needed for active sonars. However, unlike active sonars, explosive ordnances and the EER source are broadband, contributing significant energy from tens of hertz to tens of kilohertz.	
Orca-13	J. Only 200 estimated yards between the explosive and any given marine mammal seems insufficient when the propagating effects of the explosion are so difficult to measure accurately, given the unpredictable effects of explosions and the uncertainty of presence of marine mammals at any distance from the explosion. Currently proposed monitoring is not likely to be effective even in normal sea-state conditions. These exercises would take place in the midst of multiple ships, sometimes operating unpredictably (for marine mammals) at high speeds, detonating munitions and sonobuoys and	The effective safety zones depend upon the explosive source. For non-explosive gunnery rounds, the 200 yards mentioned in the comment is considered sufficient. For explosives, the safety distances (buffer zones) are larger as seen in the examples below:  Explosive gunnery – 600 yards  Explosive source sonobuoys – 1,000 yards  Bombing – 1,000 yards

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	deploying high-powered and explosive sonars, often making recognition impossible. Training monitors with visual and audio examples interpreted by experienced cetacean observers would improve reliability, though even that would fail to detect marine mammals in most cases. The Navy should at minimum improve the mitigation measures to include training of monitoring personnel by experienced whale biologists to improve recognition of marine mammals by visual and acoustic monitoring. However, even with the best monitoring by experienced people, the mitigation measures are inadequate due to the elusiveness of the animals.	Sinking exercise – 1 nautical mile  All of these mitigation measures are further described in Chapter 5 of the EIS/OEIS.
Orca-14	K. Given that detecting marine mammals reliably enough to assure that no mortalities will take place, as claimed in the Navy's EIS, is essentially impossible, the long-term challenge is to dial down the need for these training exercises altogether, which is a problem of international relations and diplomacy. President Obama and Sec. of State Clinton can prevent this danger to marine life by fostering improved international communications and reducing hostilities. Environmental organizations from the Pew Charitable Trust to the US Commission on Ocean Policy, mandated by Congress to recommend policy toward oceans, have strongly advocated adopting a new attitude about how we treat the oceans. Disregard of cumulative impacts of everything from spent materiel to engine waste by multiple vessels and aircraft, all simulating wartime decision-making, certainly has a destructive effect on functioning marine ecosystems. In war, military forces can claim the luxury of focusing on short-term results of their decisions, if they are to defeat the enemy. While recognizing that current international relationships are conducive to preparation for war, it is precisely the need to consider the downstream effects of our decisions, down unseen generations, that is called for if we are to hold any hope of passing a livable world to future generations. More creative solutions for the problems now at our doorstep and looming dark on the horizon must be put forth, than to simply prepare for and risk returning to wartime thinking.	The Navy is confident that none of its activities are likely to result in any marine mammal mortalities.
Oregon Coastal Caucus (OCC)-01	The Coastal Caucus is comprised of the nine legislators representing the Oregon coast. We are committed to the preservation of our communities' natural and socioeconomic resources. Often these resources have a variety of uses including commercial and recreational fishing, visitor enjoyment, and also preserving our national security. It is through the open communication between stakeholder groups that resources are better managed and conflict of uses are minimized or avoided. Public comment is one avenue that is used to facilitate this type of communication; another is collaboration between user groups.  On January 30, 2009 the Navy held a scoping meeting at the Hatfield Marine Science Center, Newport, OR. It was the intention of this meeting to inform the public of the proposed Navy action to expand the Northwest Training Range in Oregon's waters and to solicit public comment. Governmental agencies, organizations, and the public were supposed to be informed so that they could participate in these conversations. However, due to the lack of communication, paucity of advertising, and tight timeline, most interested parties, including the Coastal Caucus, were not informed of the event until	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.

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	the day before.  Given the importance of this matter, the Coastal Caucus respectfully requests the Navy hold another public hearing to pursue further communication with commercial and recreational ocean user groups and to gather Oregon specific information so that impacts on these communities can be minimized. In addition, we request the Navy extend the public comment period 30 days past the February 11 tl1 deadline to allow for all stakeholders to be involved. Thank you for your consideration,	
OCC-02	We are writing to reassert our request for a 30-day public comment period extension beyond the initial deadline of February 11, 2009 on the proposed training range expansion. It is our primary concern that the Navy's Environmental Impact Statement (E/S) is a complete and thorough document that not only serves the Navy's needs, but also the needs of the environment belonging to the people of the United States. As you know, the National Environmental Policy Act (NEPA) requires the Navy to integrate environmental values into your decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. We are pleased to see that the Navy is engaging in the NEPA process by conducting an EIS; however, we are concerned that an insufficient amount of time has been provided for leading scientific experts, relevant state agencies, and concerned citizens to fully participate in making the EIS the best document it can be.  Accordingly, it is our request that the Navy: 1) extend the public comment period for another 30-days beyond the initial deadline; 2) fully review and incorporate information provided by the public into the EIS; and 3) hold at least one more public hearing so that the public can become better informed to the needs of the Navy, and the Navy can comply with the spirit of the NEPA process.  It is our hope that this letter provides the Coastal Caucus with standing to provide future comments regarding this matter. We look forward to working with the Navy on this matter	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Oregon Congressional Delegation (CODEL)-01	We are writing to request an extension to the February 18, 2009 public comment deadline set for the draft Environmental Impact Statement/ Overseas Environmental Impact statement (EIS/OEIS) for the U.S. Navy's expanded use of the Northwest Training Range Complex off the Oregon coast.  The EIS/OEIS was released on December 29, 2008 with an electronic copy available on the Northwest Training Range Complex website. However, many citizens who live in potentially affected areas along the Oregon coast have expressed concern and frustration at the lack of public notice and the limited time to provide official comments to the U.S. Navy. The EIS/OEIS is 1,068 pages of dense technical language and yet most Oregon coast residents were not aware of the proposal's existence until a January 30, 2009 public meeting in Newport, Oregon. In addition, coastal residents have raised questions and serious concerns about the impact of the Navy's plans on	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Because the Navy's proposed activities would continue to be concentrated in or off the coast of Washington, three of the five scheduled hearings were held in Washington. Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport,

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	coastal fisheries, tourism, ongoing efforts to develop alternative energy sources, and marine mammal research.	OR; Feb 2, 2009-Eureka, CA; and February 26, 2009-Tillamook, OR.
	We believe that successful and innovative projects in Oregon require an open, fair communication process between private businesses, government, and citizens. In light of the complex issues at stake and unanswered questions regarding the potential impact of the Navy's plans, we ask that you both extend the public comment period to April II, 2009 and hold at least two additional public meetings in Oregon, including one in Tillamook County, to ensure that those who may be affected and wish to comment on the project may do so.  We appreciate your immediate attention on this matter. If you have any additional questions, please contact Alison Craig in Congressman Schrader's Oregon office at (503) 588-9100.	
	We are writing today to provide our comments on the proposed expansion of the Northwest Training Range Complex ("'NWTRC"). First and most importantly, we would like to express our strong support for the Navy's ongoing efforts to strengthen and sustain military readiness. Your efforts to provide personnel with access to realistic training environments are critical to helping maintain our national security. Additionally, we sincerely appreciate the additional time the Navy provided to allow Oregonians to comment on this important and sensitive issue. As the Navy moves forward in the NWTRC decision-making process, however, we cannot overstate the importance of proceeding in a manner that fully considers the environmental and economic needs of our constituents and coastal communities in addition to the military needs of our country.	The Draft EIS/OEIS fully meets the requirements of NEPA. The Draft EIS/OEIS explained and analyzed the potential impacts of the Navy's proposed activities, including cumulative impacts. It provided an analysis of reasonable alternatives and specified effective mitigation measures. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Oregon CODEL-02	Based on a number of comments we have received from a variety of interested stakeholders and constituents, we are concerned that many of the Navy's training proposals, including underwater minefield testing, explosive ordinance use, expanded land and air-based exercises, and widespread sonar training in particular, pose substantial environmental and economic risks. For example, you are no doubt aware that there are significant and seemingly unresolved concerns about the Navy's proposed action and the Draft Environmental Impact Statement. These include concerns that the Navy failed to adequately meet the National Environmental Policy Act requirements that compel the Navy to identify and fully explain the potential impacts — including cumulative impacts, provide an analysis of reasonable alternatives, and specify measures to mitigate potential harms. We would like to take this opportunity to highlight a few of the other outstanding key concerns in an effort to make sure they are given appropriate consideration.	
Oregon CODEL-03	1. Training activities have the potential to cause irreparable harm to the fisheries and the many industries dependent upon them along the Oregon Coast. The 2006 value of Oregon's commercial fishery was placed at 5421 million and an additional 531.9 million was generated by the recreational fishery in 2005. The training activities have the potential to damage essential fish and hard-bottom habitats, as well as alter patterns of fisheries, potentially severely damaging economic and social outcomes for coastal and coastal-	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity

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	neighboring Oregon communities. Significantly, there is a great deal of expertise to be found both within the fishing and the academic community on the Oregon Coast. We urge the Navy to work with our Coastal communities in assessing impacts and finding adequate ways to mitigate impacts, including working with communities on the scheduling and locating of activities.	over the past several decades.  Of primary importance, there are no restricted areas in the NWTRC.  Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Oregon CODEL-04	2. The use of sonar has been associated with significant impacts on marine mammals. Off the Oregon Coast, the potentially detrimental effects are even more worrisome given the number of threatened and endangered species at risk. Several of the comments identified concerns with the comprehensiveness and inclusiveness of the scientific data and methodologies employed by the Navy to assess the potential consequences on marine mammals. We urge you to look closely at the comments provided on this matter and work to address these concerns.	The Navy is looking closely at every comment received. Concerning potential harm to marine mammals, resource specialists have completed a thorough analysis of the risks to marine mammals and included their results in the EIS/OEIS. In addition, it is important to look at the Navy's historic use of sonar in this same area.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Oregon CODEL-05	3. Potential impacts on endangered leatherback sea turtles, sea birds, and other species have also been identified by both constituents and the Navy in the Draft Environmental Impact Statement. We urge the Navy to fully consider and minimize any impacts and to develop a plan for impact mitigation/minimization.	Each of these valuable resources has been analyzed for potential impacts from the Navy's training activities. The results can be found in the EIS/OEIS in sections 3.6 (marine plants and invertebrates), 3.7 (fish), 3.8 (sea turtles), 3.9 (marine mammals), and 3.10 (birds). Mitigation measures (where appropriate) are included in Chapter 5.
Oregon CODEL-06	4. Training activities have the potential to release a variety of hazardous materials into sensitive marine ecosystems. We urge the Navy to determine how best to minimize these impacts, to develop a mitigation plan for doing so. and to review that plan with other relevant authorities.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Oregon CODEL-07	In order to avoid needlessly risking such adverse consequences. we urge the Navy to reconsider the variety of scientific studies and methodologies used to support its environmental review process, to more fully explain potential environmental and cumulative impacts, to analyze all reasonable alternatives. and to identify measures that may actually mitigate harm.  We thank you in advance for your consideration of these comments. We hope to be able to work with the Navy to ensure that the substantive environmental, economic and social concerns of our constituents are considered as you move forward in designing this project. If you have any questions or comments you may contact Michele Miranda in Senator Wyden's DC office at 202224-3163 or Jeremiah Baumann in Senator Merkley's DC office at 202-224-3753.	The Draft EIS/OEIS fully meets the requirements of NEPA. Some improvements have been made in this Final EIS/OEIS, resulting from specific public comments.
Oregon Deparment of Environmental	Oregon's Department of Environmental Quality (DEQ) is interested in the Northwest Training Range Complex Draft EIS/OEIS, which proposes training	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.

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Quality (DEQ)-01	increases at Northwest Training Range Complex (NWTRC) Study Area. Proposed activities in areas W-570, W-93A and W-93B of the PACNW OPAREA are of interest to DEQ, even though this area is outside the 12 nautical mile line. The proposed alternative will increase the use of hazardous materials which can easily transport through the water column, the food web, and across political boundaries.	
	DEQ is concerned about any proposed increase in discharge of toxic pollutants into the environment, particularly those that are persistent or bioaccumulative. DEQ is concerned about the potential for increased body burden of toxic substances in fish, and is currently revising its water quality standards to incorporate new information about quantities of fish consumed by Oregonians. Additionally, DEQ is developing a prioritized list of persistent pollutants for surface water that will be completed by June 2009.	
	Pollutants such as heavy metals and polycyclic aromatic hydrocarbons (PAHs) are hazardous to human health and aquatic life at relatively small doses. Regardless of selected alternative, the Navy should continue to manage hazardous materials in compliance with applicable federal and state regulations, and Department of Defense guidelines.	
	The Oregon Department of Fish and Wildlife (ODFW) has reviewed the Navy's Draft EIS/OEIS for the Northwest Range Training Complex, and we have several comments and recommendations to offer. Our comments are directed to potential impacts on natural resources (i.e. marine plants, invertebrates, and fish), commercial and recreational fishing interests, nonfishing recreation interests (e.g., whale watching), and the public safety of ocean users within both State and Federal waters directly offshore of Oregon. We defer commenting on marine mammals and birds to our federal counterparts (NMFS and USFWS) that have jurisdiction over these species. The following are our comments, in no particular order:	Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California. Also, no training involving live explosives take place within 3 nm of shore. The Final EIS/OEIS has been revised in several places to make that point clear.
Oregon Department of Fish and Wildlive (F&W)-01	• We request that the Final EIS denote exactly what the inshore boundary is for each proposed training exercise so that we can better determine impacts to our State interests. In the Draft EIS, it was very difficult overall to determine how far inshore particular training exercises would occur. For most Naval exercises in the PACNW OPAREA, the EIS does not explicitly state what the inshore boundary of training exercises would be (notable exceptions are the sinking exercises, air-to-air missile exercises, the Portable Undersea Tracking Range submarine exercises), therefore we must assume that they may occur as far inshore as the coastline. It is therefore our understanding that the following activities may occur inshore in all State waters: antisubmarine tracking exercises, extended echo ranging (i.e. tracking) exercises, surface ship tracking exercises, submarine tracking exercises, and electronic combat exercises.	
Oregon F&W -02	• We request that the Navy provide specific density estimates for expended training debris (e.g., ordnance, cannon shells) on the seafloor in the Final EIS so that we can adequately assess potential impacts to natural resources. The assumption in the Draft EIS of an even distribution of expended items throughout the PACNW OPAREA is not realistic. To address this issue, the	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 consider higher concentrations based on typical exercises where

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	Navy should provide density estimates for seafloor debris generated by dividing the number of each type of expendable used in a training exercise by the average (and minimum) surface area over which the training exercise takes place - not the entire PACNW OPAREA. For example, if 4,000 cannon shells with depleted uranium were used in an exercise that covered 10 square nautical miles, then the density for this expendable type would be 400 shells per square mile per exercise. The density estimates for individual training exercise could then be averaged into an overall mean. We could then gauge whether the possibility exists for significant accumulation of expended items and their associated pollution.	either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities. Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. This, after decades of similar Navy activities.
Oregon F&W -03	We strongly recommend that the Navy reconsider its position that it will not restrict training exercises in time or space in order to avoid sensitive habitats, species, and fisheries. The marine environment offshore of Oregon has numerous areas of high-value habitats (both permanent and seasonal), Essential Fish Habitat, Habitat Areas of Particular Concern, Marine Reserves (proposed), and important fishing grounds. These areas include, but are not limited to, Stonewall Bank, Heceta Bank, Daisy Bank, Nehalem Bank, and Astoria Canyon. These areas can be identified by consulting with resource managers, marine scientists, conservationists, and commercial and sport fishing representatives. We encourage the Navy to collaborate with these entities (through a workshop?) to arrive at a reasonable and mutually acceptable arrangement.	This mitigation measure was eliminated from further consideration as explained in Section 5.2.1.5 of the Draft EIS/OEIS. (Avoiding habitats and complex/steep bathymetry, including seamounts, and employing seasonal restrictions)
Oregon F&W -04	Because of the significant safety risk to trawlers from submarine operations, we advocate that the Navy engage in direct dialogue with the trawling community and co-develop a mutually acceptable warning system that will alert trawlers when submarines are operating in the same area.	There have been no documented instances within the NWTRC of U.S. submarine entanglement in fishing gear, causing damage to the fishing vessel. In the case of an incident as described, fishermen can make an admiralty claim for reimbursement for any damage.
Oregon F&W -05	• We are concerned about debris from training exercises interfering with fishing operations. There is both a safety concern for trawlers that could bring up unexploded ordnance or toxic materials, and a concern about physical damage to fishing gear or lost fishing time dealing with debris caught in trawl nets. A dialogue with fishing representatives could help resolve some of these issues, and it would be worthwhile to explore the utility of successful models of industry communication with our diverse fishing fleet (e.g., the Oregon Fishermen's Cable Commission; see http://www.ofcc.coml).	In the case of damaged fishing gear, fishermen can make an admiralty claim for reimbursement for any damage.  Text section 3.16 Public Safety of the FEIS has been edited to include information on unexploded ordnance relative to fishing trawlers.
Oregon F&W -06	We are very concerned about contamination of the marine environment and living resources (and possible bioaccumulation up the foodweb) by hazardous materials present in Navy-generated marine debris (e.g., missiles, cannon shells, bombs), which would increase significantly under the Navy's preferred alternative. Because contamination is such an important potential effect of Navy activities, we recommend a more thorough treatment of this topic in the Final EIS. For example, we find it inadequate that only two studies, one of which was from 1974, were cited in support of the conclusion that depleted uranium contamination was inconsequential in marine environments.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS. This analysis in the Draft EIS/OEIS is thorough and complete.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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Oregon F&W -07	We request that the Navy elaborate on how the existing and proposed increased debris generated from training activities will be (or has been) addressed by the Interagency Marine Debris Coordinating Committee.	The Interagency Marine Debris Coordinating Committee has not directly addressed the issue of the Navy's military expended materials use in the NWTRC.
Oregon F&W -08	We request that the Navy develop a reporting system to communicate to stakeholders and the public about the type, general location, and quantity of marine debris generated from training activities on a periodic (e.g., annual) basis.	Please see Page 3.3-10; Hazardous Materials and Wastes for the results of recent studies conducted by the Northwest Fisheries Science Center (NOAA) concerning the current level of military expended material on the ocean floor. NOAA conducted a survey of materials generically referred to as "marine debris" by NOAA off the West Coast of the United States during 2007 and 2008
	We request more detailed information about the decommissioned ships under consideration for the sinking exercises (e.g., size, type, contamination type and level). Although ships will be cleaned to EPA standards, it seems likely that decommissioned ships may remain highly contaminated and	1. The specific ship is typically not identified until six to nine months prior to the event. Size of ship is usually frigate size up to cruiser or stores ship (AE, AOE, AFS) or an amphibious ship. More about specific ship class sizes can be seen at http://www.nvr.navy.mil/ .
Oregon F&W -09	disposing these ships in the marine environment may not be appropriate. We are particularly concerned about the potential that ships from the "Mothball Fleet" in San Francisco Bay will be sunk during these exercises.	The ships are NOT highly contaminated. Sinking ships at sea during naval exercises has been safely done for many years with no demonstrated damage to the environment.
		3. Specifically regarding the ships from Suisun Bay, the Navy is required to clean the hull exterior of any ship that will depart Suisun Bay whether or not the ship is destined for SINKEX or scrapping. This is a requirement by the State of California before the ship can be towed down the river and out through San Francisco Bay.
Oregon F&W -10	We encourage the Navy to consult with State and Federal resource management agencies (e.g., ODFW, NMFS) about siting where vessels will be sunk during the sinking exercises. This collaboration would be important in order to avoid high-value habitats and minimize impacts to natural resources.	Because the sinking exercise takes place at least 50 nautical miles from shore, in water depth of at least 6,000 feet, there is no requirement to consult with NMFS or ODFW on this exercise.
	We request that the Navy significantly expand the EIS chapters on socioeconomic and public safety considerations (e.g., estimate potential	Revisions have been made to better describe that no revenue losses will result and to describe the effects of unexploded ordnance.
Oregon F&W -11	fishing revenue losses and the number of unexploded ordnance expected to end up on the seafloor). The EIS focused on the socioeconomic impacts to Washington State, and we would like to see a similar analysis of potential	Emphasis has been placed on Washington as that is the location for the vast majority of the proposed training activities.
	socioeconomic impacts to Oregon, particularly for the fishing industry.	Text section 3.16 Public Safety of the FEIS has been edited to include information on unexploded ordnance relative to fishing trawlers.
Oregon F&W -12	We strongly oppose the continued use of ammunition containing depleted uranium in our offshore waters because of: 1) the known hazardous properties of depleted uranium, 2) the unknown biological and ecological effects of this substance in the marine environment, and 3) unrealistic estimates by the Navy of the density of spent shells on the seafloor.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Oregon F&W -13	We support the use of tungsten-based cannon shells instead of depleted uranium-based shells.	Tungsten will replace depleted uranium in 20mm cannon shells. Please see Section 3.3.1.1 for a description of the tungsten rounds.

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Oregon F&W -14	We request that the Navy address how they are attempting to balance the competing demands of the actions proposed in the West Coast Governor's Agreement on Ocean Health (e.g., clean coastal waters, healthy ocean and coastal habitats) with the pollution and potential impacts associated with Naval exercises.	None of the four immediate actions proposed in the West Coast Governor's Agreement on Ocean Health require any action by the Navy. The Navy does not consider its proposed activities to be in conflict with the goals of the West Coast Governor's Agreement on Ocean Health.
Oregon F&W -15	We have significant concerns about the potential impact of active midfrequency sonar activities on cetacean populations, many of which are ESA listed species. While these species are not regulated by the State of Oregon, they are important to the State ecologically, economically (e.g., whale watching), and aesthetically. We strongly request that the Navy consider mitigation steps that would minimize the overlap in space and time between Naval activities and cetacean concentrations (e.g., seasonal or area closures).	Seasonal and geographic restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Oregon F&W -16	We request a more in-depth analysis of the potential effects of midfrequency sonar on fishes that occur offshore of Oregon, particularly those species known or suspected hearing specialists (e.g., herring, anchovy, sardine, bathypelagic species including Myctophids). There appears to be significant uncertainty regarding the effects of mid- frequency active sonar on fishes, especially for hearing specialists such as Clupeids and deep-sea species that inhabit the deep scattering layer. The ecological ramifications of lethal and sublethal effects on forage species and species in the deep scattering layer could be significant, and should be addressed. In the longterm, we suggest that the Navy fund more scientific studies to investigate the effects of mid-frequency sonar on fishes.	The analysis of sonar effects on fishes is thoroughly presented, in Section 3.7.1.5 and in Section 3.7.2.2 of the Draft EIS/OEIS. The Navy's research efforts are not part of this EIS/OEIS.
Oregon F&W -17	• In light of our numerous recommendations that highlight the need for communication between the Navy and stakeholders, we recommend that the Navy facilitate the creation and maintenance of a stakeholder group for the purpose of engaging in two-way dialogue about issues of concern, giving and receiving feedback, and dispensing of information. The Navy should consider assigning a liaison to facilitate such a group and maintain open channels of communication with stakeholders.	Appendix F gives the process the Navy has implemented for communicataion with stakeholders. The Navy has informed and invited the entire list included in Appendix F to participate and give feedback to the EIS/OEIS process.
Oregon F&W-18	We strongly recommend that the Navy incorporate a detailed adaptive management plan in the EIS, especially since the results of this process will remain in effect indefinitely. Inclusion of an adaptive management plan would be very useful if, for example, natural resources are affected more than anticipated by Navy exercises, or if new scientific information indicates that effects may be greater than originally anticipated.	The Navy applies adaptive management principles in the development of its monitoring and mitigation processes.
Oregon F&W -19	There are several errors (or potential errors) in the EIS that should be addressed:	Thank you. The Final EIS/OEIS has the corrected information included.

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	• Scorpionfishes, searobins, and sculpins are given as example family descriptions for both the Scorpaenidae and Triglidae in table 3.7-4 on page 3.7-19.	
Oregon F&W -20	• There is an apparent error in the EIS on page 3.7-22 that states fishes in the order Scorpaeniformes (e.g., rockfishes) are thought to have poor hearing ability because they lack a swimbladder. However, these species <i>do</i> have swimbladders, so it is unclear if the assumption of poor hearing is valid for this group.	Thank you. The Final EIS/OEIS has the corrected information included.
	• It was unclear where some of the fishery values came from, e.g. \$39 million for miscellaneous invertebrates in 2007, which is an apparent error.	The table has been updated with the most current report (dated March 2009) for the 2007 season.
Oregon F&W -21	Thank you for providing us the opportunity to contribute comments on this project. We appreciate the Navy's commitment to maintaining and enhancing our national security, and the open and detailed treatment of potential impacts in the Draft EIS. We respectfully request that our comments and recommendations are given due consideration.	
	I am writing in response to the solicitation for comments on the N011hwest Training Range Complex Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS), At the request of the Governor's Natural Resource Office, I am providing the following comments on behalf of the Oregon Parks and Recreation Department. These comments have also been submitted online.  Oregon Parks and Recreation Department (OPRD) has jurisdiction over and administrative rules that govern the Ocean Shore Recreation Area as specified in Oregon's Beach Laws (ORS 390,605-390,770), OPRD manages the ocean shore to promote public health, safety and welfare, and to protect its values and those of areas adjacent to and adjoining it for natural beauty, ecosystem function and public recreational benefits.	In the unlikely event that naval military expended material requiring an emergency response were to come ashore, anyone finding such materials should contact their local emergency response agency. Based on Navy's long history of training in waters around the U.S. without causing health risks to the public, Navy disagrees that it is imperative that an emergency response and salvage plan be developed in coordination with appropriate state and federal agencies.
Oregon Parks and Recreation Department (OPRD)-01	The draft EIS/OEIS notes that the proposed activities would occur offshore of Oregon, primarily beyond the 12 mile territorial sea, However, given the wide variety of activities proposed (e.g." live fire training against surface and air targets, gunnery and bombing, missile firing, torpedo firing, vessel movements, aircraft operations, active sonar operations, Unmanned Aerial Systems etc.), OPRD has concerns regarding the potential for impacts to the Ocean Shore Recreation Area.	
	The EIS mentions that, "although extremely rare, some solid training materials can migrate ashore where the public could encounter them" (3,16-11), There is the possibility, although unlikely, for failure of the built-in redundancies to prevent such occurrences, for example, in a storm event. OPRD is concerned that the draft EIS/OEIS does not mention an emergency response and/or salvage plan, If naval vessels, naval marine debris and/or hazardous materials were to come ashore, they would potentially pose a safety risk to ocean shore visitors and resources. It is important to us that an emergency response and salvage plan is developed in coordination with appropriate state and federal agencies (e.g." OPRD and its partners in the Oregon Emergency Response System) and that the plan is considered with	

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	respect to the environmental impact) as well.	
	Please let me know if you have any questions or if I can be of further assistance.	
Oregon Shores Conservation Coalition (OSCC)-01	Oregon Shores Conservation Coalition respectfully requests an extension to the February 18, 2009 public comment deadline set for the draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for the Navy's expanded use of the Northwest Training Range Complex off the Oregon coast.  Oregon Shores has over 500 members nearly 1,300 CoastWatch "mileadopters" who live along Oregon's coast, and across the state, and each of these citizens cares deeply about protecting the coastal region's terrestrial and marine ecosystems for future generations. Further, many of our members, and the coastal public in Oregon, have a proud and effective history of engaging in planning and management decisions that impact the future of Oregon's coastal and ocean resources through public processes provided by our local, state and federal agencies.  Since the Navy's only Oregon public hearing was held in Newport on January 30, Oregon Shores has received numerous phone calls and email message from our members and the public who were alarmed by the lack of public knowledge about the Navy's proposed expanded use of the Northwest Training Range Complex and upset with the inadequate timeline for public review of the colossal environmental impact document.  Frankly, many Oregonians, including scientists, media professionals, agency staff, public officials, fishermen and conservationists were taken off guard. And, the Navy's "stealth" EIS comes at a time when Oregon citizens are particularly geared up for involvement in decisions about Oregon's ocean. The Navy's process is in stark contrast to deliberative public engagement processes currently underway in Oregon on key issues including establishment of a system of marine reserves, planning for wave energy development projects and amending our comprehensive plan for Oregon's territorial sea.  Oregon Shores fully concurs with the Oregon congressional delegation, as stated in their second letter to you, dated February 13th, that "meaningful public comment is clearly par	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.
Osteen-01	My name is Sam Osteen. I've lived in Oak Harbor for eight years. I served four years active duty in the Marine Corps in the 1980's. I chose to move here because of the waters of the Puget Sound. I came out here to check it out and was stunned by the natural beauty of the sound and the surrounding area. I'm an avid hiker and SCUBA diver, and when we aren't hiking in the wilderness areas of the Cascades or the Olympic peninsula, my wife and I go diving just about every weekend.	The Navy representative provided correct information concerning the Navy's policy about plastic discharge at sea. Unfortunately, Table 3.4-1 in the Draft EIS/OEIS presented out-of-date information. The Navy's current policy, described in its Environmental Readiness Program Manual, does not allow plastic discharge at any distance from shore. This table (now Table 3.4-2 in the Final EIS/OEIS) has been updated to reflect the current information.

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	This area is very special. I can think of no other place in the world with the same diversity of opportunities for enjoying the natural environment so conveniently. Within a short drive from our house we could be enjoying some of the best diving in the world, or hiking a well-maintained trail in a coastal rainforest, an alpine meadow, or a desert mesa. The beauty and diversity of life we've seen under our local waters is amazing, from giant pacific octopus to the tiniest nudibranch, and a lot of it is unique to this region. It's impossible to relate the splendor and majesty of the natural environment of this area with mere words.	
	I attended the public hearing on the Northwest Training Range Complex Environmental Impact Statement (NTRCEIS) in Oak Harbor on January 27,2009. I was impressed with the professional-looking presentation of the informational displays. There, I spoke to a Navy representative (I forgot her name) about the problem of plastic pollution in the ocean. She said she had heard about the huge area of floating plastic in the North Pacific Gyre, and the problems it causes to sea life. I mentioned to her I was surprised to learn recently that dumping of trash is still a common practice of ocean vessels, and she told me unconditionally, "The Navy does not dump trash into the ocean." She said that dumping of trash from Navy ships stopped years ago. Table 3.4-1 on page 3.4-19 of the EIS clearly shows that this is not entirely true. While there are restrictions, there are also many conditions where discharge of plastic garbage into the ocean is permitted. So, your people are giving out misleading information. This is unacceptable.	
Osteen-02	Page 3.4-36 of the EIS mentions the production of hydrogen fluoride from the operation of explosive sonobuoys. Hydrogen fluoride converts immediately into hydrofluoric acid on contact with water. Hydrofluoric acid is highly toxic and corrosive. However, there is no mention of hydrofluoric acid in the discussion of detonation byproducts of sonobuoys. This is misleading and unacceptable.	The following text has been added to Section 3.3 Hazardous Materials: "According to WHO (2002), the concentration of fluoride in seawater ranges from 1.2 to 1.5 mg/liter. Upon entering dilute solution of either freshwater or saltwater, hydrofluoric acid dissociates into its positive and negative ions. Once this occurs, "fluorides associate with various elements present in the water, mainly with aluminum in freshwater and calcium and magnesium in seawater, and settle into the sediment where they are strongly attached to sediment particles (ATSDR 2003)."
Osteen-03	Throughout the EIS, the word "negligible" is used to represent the threshold level of pollutants which may be safely ignored. The main operators which reduce the hazards to "negligible" levels are dissolution and dilution. While dilution may reduce the concentration of a toxin to a level which is unlikely to cause significant effects immediately, eventually the solution becomes saturated. For toxins which degrade over time, it may be possible that they don't accumulate if the level of release is low enough. But some of the hazardous materials released to the environment by Navy training are persistent: they do not significantly degrade over long periods of time and they accumulate in the tissues of marine life. The only responsible way to handle these substances is to eliminate their release into the environment. Concerning persistent bio-accumulative toxins, there is no level of discharge which may safely be ignored, and mitigation by dilution is unacceptable.	Saturation of solution should be viewed in the context of: 1) the size of the Pacific Ocean vs. the amount of training materials with potentially hazardous materials; 2) not all components of training materials dissolve in seawater; 3) not all components of training materials stay in solution, i.e., they may precipitate out of solution if they adhere to organic matter or react chemically with components of seawater and no saturation will occur; and 4) mixing and dilution from wave action or currents are valid assumptions in the context of this EIS.  Few general statements that are accurate can be made concerning the length of time a given training material will persist in the ocean, what degradation products will result, the fate of those products, whether they are hazardous or not, and whether they bioaccumulate. In order to respond to such concerns, the following specifics are required: material, location, local conditions, and organism involved. These factors are discussed in detail in the Draft EIS/OEIS section 3.3 Hazardous Material

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		(pp3.3-8 to 3.3-13).
Osteen-04	As I mentioned earlier, I moved to the Puget Sound area to be near the water. I moved to Oak Harbor specifically to work in my chosen career, tool making. There aren't many manufacturing employment opportunities in this area, and I was glad to find a great job in such a great location as Whidbey Island. I soon learned, though, that there are plenty of downsides to living near a Naval Air Station; the most unpleasant is aircraft noise. I've read the technical discussion of aircraft noise in Section 3.5 of the EIS, and seen the charts like the one on page 3.5-11, but they give no impression of what it's like to live around this constant annoyance. I live right at the edge of the current 65 dB noise contour, and work considerably closer to the noise source at Ault Field. I can tell you from personal experience that this level of noise is barely tolerable. In spite of all the wonderful things about living in this area, and despite how much I love my job, there have been many times I've considered giving it all up just to get some peace and quiet. Before I moved here I lived in the middle of downtown Minneapolis, MN, and that was practically idyllic compared to here in terms of noise. In addition to this, I've had several experiences over the last few years where, even in the most remote parts of the wilderness areas of the Cascade mountains, in areas so wild there is no sign of human influence as far as the eye can see from atop a 7000 ft. mountain - even here your military jets can intrude, thunderously disrupting what was a peaceful environment. It's impossible to relate the effect this has on the outdoor experience in words. One fly over can ruin a whole weekend trip. In fact, as I write these words right now, the loudest sound in my home is a military jet going by. This is unacceptable.  The new EA-18G aircraft may not yet be fully deployed here, but I have already had several opportunities to compare it's noise levels to the older EA-6B; they fly directly over my workplace at very low altitude, sometimes alter	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  The conclusion to Section 3.5.4.2 referred to noise resulting from activities in the training areas, not noise associated with takeoffs and landings at Naval Air Station Whidbey Island.
Osteen-05	I only found out about the EIS hearing in Oak Harbor because a friend emailed me. I saw no advertisements or announcements about it of any kind in any medium. When I got to the hearing, as I mentioned earlier, I was impressed by the professional-looking presentation. You obviously spent a lot of resources creating the materials and prepping your people. However, as time went on I started noticing something. What I noticed is that, even though on first glance it appears you went to a lot of effort to provide information, in reality the opposite is true. You put a lot of effort into making the posters and brochures good-looking, but you made the essential information as inconvenient to access as possible. Several people presenting statements at the hearing mentioned that the website providing access to review the document was unavailable for a significant portion of the review period. I've	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	seen no indication that the review period will be extended to the full time because of that. Unacceptable. I wanted to read the document myself, so I took one of the CD/ROMs offered at the hearing home with me. First, though, I thought I'd try to use the internet version of the document. Even with a DSL connection, that experiment didn't last long; the download times were unbearable. Instead of offering the document in plain HTML format, you locked it into large, slow-downloading PDF files. There's no reason a simple document like this, mostly text with a few relatively simple graphs and charts had to be formatted as a PDF file, especially for presentation over the internet. And once I started using the CD/ROM I quickly noticed a difference between this disc and every other one I've ever used: no hyperlinked index. But even ignoring that, the document is ridiculously hard to navigate because you buried the table of contents on page 53, and you numbered the pages by section instead of sequentially. This is infuriating and inexcusable. Considering the money and time you must have spent making those posters, films, and brochures, the fact that the EIS document itself is so hard to use is unacceptable.	
	I now have a new example of how hard you are making it for the public to participate in this EIS process: I tried twice to submit this comment letter using your website's online form, and both times resulted in an error message stating "failed to add comment", etc. Maybe this resulted from me trying to copy and paste the text into the form, as I have done with this form, instead of laboriously hand-typing the whole letter again. I can't help but get the feeling that you don't actually want anyone to make comments, and despite what you say to the contrary, you are making it very hard for me to actually submit my comment. I will, however, keep trying.	
Osteen-06	Most of the things I've written about are existing conditions, in other words, representative of the No Action Alternative mentioned in the EIS. They are unacceptable, and yet they exist. Does that mean we have, in fact, accepted the current levels of intrusion by the Navy into our lives? I'd rather use a different term: allowance. The things you are doing are unacceptable, but we allow you to do them because we recognize that the Navy does indeed have a vital mission. That in addition to the unique opportunities it offers us for recreation, this area also has characteristics which make it uniquely suited to the training of our forces. I believe that the Navy would not be trying to train here if there was a better place to do it. And while I am strongly opposed to the use of our military forces in actual warfare, I believe there is a valid case to be made for having a well-equipped and trained military. But how much is enough?	This comment has been duly noted.
Osteen-07	I've been following the news about the proposed new aircraft, the EA-18G and the P-8, and I feel that it's suitable that the Navy should be upgrading its aircraft. So I'm willing to continue to make accommodations and even increase them to support the Navy's changing needs. But only what's necessary. I'll support the adoption of Alternative 1, but it's clear to me that the only reason there is an Alternative 2 proposed in the EIS is because you were uncertain the public would allow your changes to go through so you padded the deal by asking for more than what you need. I guess you think	Alternative 2 provides the decision-maker with an analysis that includes levels of training and enhancements to the range complex deemed necessary by Commander, Pacific Fleet. As stated in Section 2.6 of the Draft EIS/OEIS, Alternative 2 is the Preferred Alternative.

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	your opponents will think they scored a victory if they can claim they shot down Alternative 2, while you still get what you need. This is insulting. In spite of the good words by your people at the hearing about how the Navy is so different from the way it used to be in terms of the environment, this whole experience has left me with the feeling that it's the same old pig with new lipstick.	
Parrish-01	I am opposed to any plan the Navy has to expand its operations to include Oregon and Northern California.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Parrish-02	It is clear that the Navy has not met its obligation to comply with the National Environmental Policy Act (NEPA). The public has not been adequately notified of the hearings that have been made available. Subsequently, the public has had inadequate time to review what information was provided and to do research to respond to the Navy's proposals in an informed manner.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Parrish-03	In addition to the lack of public notification is the failure to provide sufficient copies of the Environmental Impact Statement (EIS) for the public to review.	The Draft EIS/OEIS has been available for download from the project website since December 29, 2009. Copies have also been distributed to various libraries as described in Appendix G.
Parrish-04	The EIS itself is very outdated and fails to address many health concerns that will impact whales, salon, marbled-murrelets, and other flora and fauna. Some of these are federally protected under the Endangered Species Act.	Potential impacts to all species has been analyzed in the Draft EIS/OEIS. The Navy is in full compliance with the Endangered Species Act and has consulted with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service of listed species.
Parrish-05	The fishing industry is already in a critical state and this proposal of expansion will only make things worse.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
	Also needed is a list of all chemicals proposed to be used and studies of the potential health effects. Depleted uranium is an extreme health hazard.	A full and complete analysis of hazardous materials can be found in Section 3.3 of the Draft EIS/OEIS.
Parrish-06		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Parrish-07	It is also disingenuous of the Navy to provide maps of the proposed operation areas that do not include all proposed operation areas. If drones, and whatever other machinery, would be used across the entire state of Oregon,	As described in the Draft EIS/OEIS, the only inshore or overland activities occur over Washington. No land or overland activities are proposed over Oregon or California.

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	why doesn't the Navy say so? Citizens within these areas must also be notified and given proper information and time to respond.	
Parrish-08	The Navy is deliberately attempting to circumvent the democratic process in order to push through their stated, and unstated goals. This is not the way to promote a relationship of trust, openness, and responsibility. Who would be held accountable? Who would be responsible for cleaning up the messes that were never to be created but undoubtedly will be?  This proposal is flawed and would inevitably lead to the degradation of the health and safety of all that live in this area. It needs to be withdrawn. I say NO!	The Navy is completing this process in compliance with the National Environmental Policy Act (NEPA).
Pearcy-01	I am writing to express my concern about the U.S. Navy's proposed Northwest Training Range Complex off Oregon. As an ex-naval officer I understand the need for diverse naval training, however, I believe that the proposed naval exercises in the Oregon Air National Guard's training area along the Oregon coast will adversely affect our marine ecosystems and quality of life for coastal communities and visitors.  I am a biological oceanographer at Oregon State University and have studied fish and wildlife populations off Oregon for over 40 years. I am concerned about the damage caused by use of mid-high frequency sonar on migrating and residence whales and porpoises and other marine mammals, about the disturbances that will be caused by low flying and supersonic aircraft flight, artillery practice on air or sea targets, especially on nesting colonies of birds and haul-out rookeries for seals and sea lions. These operations, including mining operations, could affect fishes and other aquatic life and our marine reserves along the coast, as well as fishing operations by commercial and sports fishers. These may generally degrade the coastal environment for residents and visitors.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Pearcy-02	I could not find specifics on the Navy's proposed NWTRC operations in the EIS, but I submit that the activities cited above in the range off Oregon could have serious negative impacts on marine animals, some of which are federally listed as threatened or endangered or are listed as Oregon State sensitive species by the Oregon Department of Fish and Wildlife. Any operations should be carefully reviewed and approved by the State of Oregon and the US Fish and Wildlife Service to insure against negative impacts.	Potential impacts to all species has been analyzed in the Draft EIS/OEIS. The Navy is in full compliance with the Endangered Species Act and has consulted with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service of listed species.
Peregrine-01	I live on the coastal border between Mendocino Co. and Humboldt Co, the southern border of your wargames planned terrain.  One issue that wasn't brought up at the recent Mendocino Co. hearing, which needs addressing –the Asian tsunami was postulated to have been triggered by underwater explosions. What do you have in place to deal with possible tsunami effect where I live? I'd like to see geologist reports on this-not naval personnel opinions!	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." (http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&n extRow=next)

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Peterson J-01	We live close to the Newport Airport (about 1 ½ - 2 miles south) and are concerned about the increase in aircraft close to our fairly new home. While we see a general need for the program—we are concerned with noise, visual impact, and damage to our lovely area. We've already had one jet fighter scream over our house (we are ocean front). The noise was deafening and our entire well-built two-story house shook! The experience was incredible and I watched as the plane continued south—over the neighbors' houses. This was in late January—many more are flying just off shore.	Military aircraft flights over Oregon or California are not part of the proposed action.
Peterson J-02	Also—our area has huge appeal for "whale watching." It really contributes to our local economy—so we're very concerned about the effects of the training on the migrating whales.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Peterson R-01	The United States Navy and the U.S. Department of Defense have decided that their Northwest Training Range Complex, in the State of Washington, should be expanded, and have devised a draft Environmental Impact Statement (EIS), dated December 2008, for public review and comment. The expansion of their area of operation will include the State of Washington, the State of Oregon, part of the state of Idaho, and parts of Northern California. This area will also include large areas of the Pacific Ocean from California to the State of Washington. (The Extent Map on ES-2, designating this program area, also extends throughout Northern California to the San Francisco Bay Area under a "warning area" designation.)	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The NWTRC EIS/OEIS study area includes no land within the states of Oregon or California. The extent map referred to in the comment has a color scheme that has been revised to remove any confusion about the range's actual boundaries.
Peterson R-02	Once implement there is no end date noted in E.I.S.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Peterson R-03	1) The Navy Environmental Impact Statement does not detail in depth the land areas to be used for training purposes. Please advise on the exact land area designations for ground-based operations.  2) The Navy Environmental Impact states does not detail in depth the flight areas over the land areas of Idaho, northern California, Oregon, and Washington. Please advise on the exact land area designations for land overflights for all states including Nevada.  3) The Navy E.I.S. does not designate if Maxwell (MOA 1,2 & 3 in California), Military Operations Areas will be used in California. Please advise if these areas will be used by either the Navy or by other branches of the military in conjunctions with this Navy Warfare testing plan.  4) The Extent Map on ES-2 designates warning areas over Idaho, northern California, Nevada, Washington and Oregon. Please define warning area and why this entire region would be under a warning area.	The land areas (Inshore areas) are described in Section 2.1.2 of the Draft EIS/OEIS. All the areas described are within the State of Washington.  The overland airspace is also described in Section 2.1.2. All overland airspace areas within the scope of this EIS/OEIS are over the State of Washington.  Maxwell MOAs are not part of this EIS/OEIS.  The extent map referred to in the comment has a color scheme that has been revised to remove any confusion about the range's actual boundaries.

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Peterson R-04	5) The Pacific Ocean flows are along the coast of the State of Washington moving south toward Southern California. If toxic chemicals and other hazardous materials are used in the ocean they will move south contaminating other ocean areas. The Navy Environmental Impact Study does not address these issues. I would like copies of all studies conducted on this type of ocean currents and how these ocean flows could negatively impact marine life all along the Oregon and California coastline.	The fate and transport of potentially hazardous materials is thoroughly analyzed in Section 3.3 of the Draft EIS/OEIS.
Peterson R-05	6) There is no start or ending date in this Environmental Impact Statement. Does this mean that once implemented this program will be ongoing in perpetuity? If there is an end date please advise.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Peterson R-06	7) Mrs. Sheila Murray (Navy Region Northwest Environmental Public Affairs Officer, cell 360-340-5398), advised me that there are ongoing Navy Warfare Testing Program ongoing in the Marinas Islands, the Hawaiian Island, Oregon, Southern California, and the State of Washington.*** Please advise if this is correct and the dates that each of these warfare testing programs began and when they are expected to end.	These ongoing projects are separate and not a part of this EIS/OEIS.
Peterson R-07	8) Since we know and it is admitted in the Navy Environmental Impact Statement that there are toxic chemicals to be used in this Navy Warfare Testing Program what studies is the Navy conducting, on an ongoing basis, with regard to water, soil, and air monitoring to make sure that the public is protected in those areas. In addition, how many ocean toxicity testing programs has the Navy implemented to protect the ocean from contamination from these chemicals?	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Peterson R-08	9) In Washington, Oregon and California does the Navy plan to pay for and implement the increased drinking water testing that will be required to monitor for these chemicals in drinking water sources, soils, and air quality? (See California State Department of Health, Drinking Water Division and California EPA water quality mandatory testing under Proposition 65 and other EPA laws.) Will California be reimbursed for the cost of such testing throughout California in order to protect the residents, their air, water and soils?	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments.
Peterson R-09	The U.S. Commander of the Pacific Fleet has given American citizens and residents of these states only a very short time to comment on their draft EIS: Published on December 30, 2008, with a final public comment deadline of March 11, 2009, this document is approximately 1,000+/- pages in length with attachments. In addition to a short comment time the Navy limited public hearings to five, with only two held in Oregon, one in California, and no scheduled hearings to be held in Idaho. The Navy has allegedly failed to place information about this EIS in major newspapers or inform our elected representatives about this program.  1) We are requesting an extension of the March 11, 2009, deadline as the public comment period is too short and the majority of citizens were not notified of this program. Since no hearings will held and no public newspaper notification appeared (prepared by the U.S. Navy), in large cities or in any state Capitol City, like Sacramento, California, this precluded the public from	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its

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	proper public notification and the ability to be attend meetings held in small communities miles away from population centers.	emphasis regarding public hearing locations.
	2) The Navy violated the Proposition 65 laws by not notifying the public throughout northern California of the threat of these toxic chemicals. The Navy E.I.S. does not address its notification requirements under this California law. The chemicals to be used in the Navy Warfare Testing Program as listed in the E.I.S. fall into the jurisdiction of Proposition 65 - therefore the U.S. Navy should be required to give clear and reasonable warning to the people of California prior to the use of any chemicals known to cause cancer, birth defects or other reproductive harm. Since the Navy Warfare Program will be using chemicals like Red and White Phosphorus	The Navy's activities are exempted from the discharge prohibition of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) under Section 25249.9 (b) (1) The discharge or release will not cause any significant amount of the discharged or released chemical to enter any source of drinking water. And Section 25249.9 (b) (2) The discharge or release is in conformity with all other laws and with every applicable regulation, permit, requirement, and order.  As none of the Navy's activities within the scope of this EIS/OEIS will take place over California, none will cause any significant amount of the
Peterson R-10	and depleted uranium, along with other airborne chemicals, the Navy program should be stopped until such time as the public is properly notified under California State Laws and the harm each of the proposed chemical	discharged or released chemical to enter any source of drinking water. Also, the Navy is in full compliance with all other regulations such as found in the Clean Water Act.
	discharges would be to the public.	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Peterson R-11	3) The Navy E.I.S. does not address the issues of airborne pollution from their chemical use blowing onto land from the Ocean. Most of the winds along the California coast are from west over the Pacific to east over land areas. Since some of the chemicals being used would reach the shore from chemical contamination of the ocean or from airborne sources the Navy E.I.S. lacked data and a clear public warning under both Proposition 65 and NEPA laws.	Section 3.2 of the Draft EIS contains the analysis that demonstrates the Navy is operating within all Federal and State (Washington, Oregon, and California) air quality standards.
Peterson R-12	"Proposition 65, the <u>Safe Drinking Water and Toxic Enforcement Act of 1986</u> , was enacted as a ballot initiative in November 1986. The Proposition was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects or other reproductive harm, and to inform citizens about exposures to such chemicals."	The Navy's activities are exempted from the discharge prohibition of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) under Section 25249.9 (b) (1) The discharge or release will not cause any significant amount of the discharged or released chemical to enter any source of drinking water. And Section 25249.9 (b) (2) The discharge or release is in conformity with all other laws and with every applicable regulation, permit, requirement, and order.
	"Proposition 65 requires the Governor to publish, at least annually, <u>a list of chemicals known to the state to cause cancer or reproductive toxicity</u> ."	As none of the Navy's activities will take place over California, none will cause any significant amount of the discharged or released chemical to
	25249.5. Prohibition On Contaminating Drinking Water With Chemicals Known to Cause Cancer or Reproductive Toxicity. No person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive	enter any source of drinking water. Also, the Navy is in full compliance with all other regulations such as found in the Clean Water Act.

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	toxicity into water or onto or into land where such chemical passes or	
	probably will pass into any source of drinking water"  22349.6. Required Warning Before Exposure To Chemicals Known to Cause Cancer Or Reproductive Toxicity. No person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual "  22249.7. Enforcement.  (a) Any person that violates or threatens to violate Section 25249.5 or 25249.6 may be enjoined in any court of competent jurisdiction.  (b) (1) Any person who has violated Section 25249.5 or 25249.6 shall be liable for a civil penalty not to exceed two thousand five hundred dollars (\$2500) per day for each violation in addition to any other penalty established by law. That civil penalty may be assessed and	
	recovered in a civil action brought in any court of competent jurisdiction.  4) We allege that NEPA laws were violated when citizens were not notified	The Navy's notification efforts exceeded the requirements of NEPA (40
Peterson R-13	about this program as required by law in California. There were no public hearings held in Mendocino County, California, as one example in violation of NEPA and no other type of notification to the public was initiated in this county.  It is alleged that the one public hearing in Humboldt violated NEPA laws in that there was insufficient public notice given to the entire population of Humboldt County.  5) It is alleged that the U.S. Coast Guard was not notified of this program in Mendocino County, CA per the U.S. Navy E.I.S. Distribution List. Please advise if the U.S. Coast Guard in Willits, CA was advised of this Navy Warfare Testing program prior to March 7, 2009.  Thus, citizens in California, Oregon, Idaho, and Washington are asking for a realistic extension of time to read, study, and comment on this decision by the Navy and the Department of Defense, past the March 11, 2009, deadline. It should be noted that very few elected representatives in California and Oregon were aware of this E.I.S. or the consequences of these actions by the Navy. The Navy should hold additional public hearings throughout California.	CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. In addition to 12 Oregon and California State agencies, 19 State and Federal elected officials of Oregon and California received notification in December 2008. During the public comment period the Navy held public hearings to present information from the EIS/OEIS and to solicit public comments. Because the Navy's proposed activities would continue to be concentrated in or off the coast of Washington, three of the five scheduled hearings were held in Washington. Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon. Please see Appendix F for a full discussion of locations.  Mendocino County is outside the action area for the NWTRC.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The USCG HQ and District 13 (Pacific NW) were on distribution list Please see Appendix F for a full list of agencies notified.
Peterson R-14	The U.S. Navy, the U.S. Department of Defense, and the Commander of the U.S. Pacific Fleet have decided, without our consent, that they are going to use the Pacific Ocean off the Coast of California, Oregon and Washington and the land over four states to test weapons of war. They did not contact	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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	Senator Harry Reid of Nevada to obtain permission to use the Nevada Test Site for these warfare experiments. Instead they decided to use public lands, the Pacific Ocean, private property, wildlife, and humans as test subjects for warfare tasting in four states.	The study area of the NWTRC EIS/OEIS does not include land areas in Nevada, Oregon or California. Approximately 60 nm² of airspace over northwestern Idaho is the only activity including that state.
Peterson R-15	The Navy also has decided to contaminate our air, water, and soils with the chemicals used in these programs. They fail to list many of the chemicals that are to be used in these programs. Thus, under the Freedom of Information Act, (this is a formal request), I am requesting a complete listing of all chemicals that will be used during these testing programs. It is easy for the Navy EIS to state that they can mitigate for such toxic usage but fail to disclose a complete listing of said chemicals. Also copies of contamination studies conducted at other military test sites where contamination problems were found and at bases (like Fallon Navy/Air Force Base), the NWT Training Range in Washington, and other locations should be made public.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-16	The Navy should make public all complaints and studies showing that the polluted areas in the State of Washington where the Navy has operated programs for over sixty years. Many residents have complained of these contamination problems from Navy programs in the past.	The sites described are outside the scope of this EIS/OEIS.
Peterson R-17	The draft EIS does not fully address the potential environmental impacts on multiple resources, like air quality, water resources, airborne acoustic environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety. Without a complete understanding of their programs it is impossible to determine any impactsthus, their EIS states that "there are no significant impacts" This statement is made throughout the entire document even though many of the chemicals used are highly toxic.	The resources listed each received a thorough and complete analysis of potential impacts from Navy activities.
Peterson R-18	1) It should be noted that the Navy E.I.S. has no designated authors. I am requesting the names of the authors and which department prepared this inadequate E.I.S.     2) The Navy E.I.S. was written by those who have an interest in promoting the Navy Warfare testing program. Thus, this E.I.S. (not written by independent and unbiased sources), does not appear to address many issues that should be addressed in such a document. It is like the fox guarding the chicken coop.	Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document. The non-Navy preparers were contracted by the Navy to provide independent analysis of the potential impacts.
Peterson R-19	3) The Navy E.I.S. does not address the synergistic impacts of the use of multiple chemicals in their testing programs on terrestrial organisms, soils, water, and air pollution (not to mention public health).	The analysis of hazardous materials associated with Navy training in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually. The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Peterson R-20	4) With the failure of the Navy E.I.S. to identify all of the air quality, water quality, and soils impacts of their programs and in listing only a few of the EPA list of toxic chemicals that will be released by military aircraft (like jet fuel emissions), the Navy has avoided any discussion of negative impacts on air and water quality. It is not sufficient to state that our air is already polluted	A full and complete analysis of these resource areas can be found in the Draft EIS/OEIS in Sections 3.1 – Geology and Soils, 3.2 – Air Quality, 3.3 – Hazardous Materials, and 3.4 – Water Resources.

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	and that additional pollutants will make no difference in air quality.	
Peterson R-21	and that additional pollutants will make no difference in air quality.  5) The Navy E.I.S. does not address issues like toxic jet fuel emissions on air pollution, beneficial atmospheric ozone depletion (nitric oxide), on agriculture and human health. *Note: The full EPA report is available online at: http://www.epa.gov/oms/regs/nonroad/aviation/r99013.pdf or on the EPA Website.  With increased jet flights over water and land this type of air pollution will increase. Please advise on any studies or reports prepared regarding the increase in this type of air, water, and soil pollution from jet fuel emissions conducted by any branch of the military service. Also note the military jet fuel and its additives are highly toxic and should be listed and addressed in the E.I.S. (Commercial and military jet fuels are not the same and the military (U.S. Air Force), has been experimenting with new types of jet fuel with unknown toxicity levels.) Please provide this information if any of this experimental fuel is to be used in the Navy Warfare Testing Program - along with their toxicity levels as related to human health, soil, water and air pollutants. Will they deplete beneficial atmospheric ozone?  There is a short listing of hazardous materials, air pollutants, and pollutants from munitions, expended materials, and radioactive materials to will be used in this project. I am requesting a complete listing of all chemicals that will be used by the Navy, Air Force, and any other branch of the Department of Defense in this project. Inshore and offshore detonations mayor may not be considered hazardous - however, until a complete listing of these chemicals is provided to the public there can be no public discussion of their hazard to public health, marine life, wildlife, public drinking water sources or our oceans. The avoidance of making this specific list public leads one to believe that these hazardous materials and chemicals are toxic and do pose environmental hazards. (California laws regarding toxic chemicals are more str	Section 3.2 of the Draft EIS contains the analysis that demonstrates the Navy is operating within all Federal and State (Washington, Oregon, and California) air quality standards.  The Navy is not testing any new fuels as part of this EIS/OEIS.  Table ES-5 is in the Executive Summary and was meant to provide only an overview of the impacts, not a summary of the materials used. That information is found in the actual section, in this case Section 3.3.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
	along with the number of pounds or gallons to be used each year.	
Peterson R-22	The public and marine life in the ocean will be subjected to various sonar and aviation noise, target noise, surface ship noise, weapons and target noise, EOD (no definition found), and underwater explosions. The Navy does admit that marine life will be harmed. However, harming our food supply, (fish like salmon), or the whales is not deemed important by the Navy, as they are expendable according to their E.I.S.	The analysis in this EIS/OEIS concludes that no marine mammal will be seriously injured or killed. This analysis also concludes that there would be no population-level effects to any species of fish.
Peterson R-23	The Navy and the Department of Defense have decided that massive warfare expenditures for testing war products and weapons using marine life and the public as guinea pigs is in our best interest. And since a lot of the	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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	equipment and other items to be tested are experimental this leads one to believe that they are testing them on us for the first time to see how they work and if the public is harmed by their usage.	
	2) Just when did the citizens of the United States agree to be warfare test subjects when the Nevada Test Site and/or Area 51 which could be used for these tests? And why use the Pacific Ocean which is a migratory haven for our food supply and valuable marine life - including those that migrate along the Pacific Coast?	
	3) And if this Navy project is approved and the health of the citizens, marine, or wildlife is threatened, who will be held responsible for this action and its negative consequences? The E.I.S. does not give the public standing to say no to this project or the consequences of being used as guinea pigs during the testing. In addition, the EIS does not state how long the testing process will last - providing us with the information that once implemented testing could be conducted forever in these areas.	
Peterson R-24	I am also requesting, under the freedom of information act, answers to the above questions, listings of the chemicals used and their exact harm to the public, animals, marine life, water supplies, trees, agriculture, and soils. This includes information on whether or not depleted uranium, red and white phosphorus, weather modification and mitigation chemicals will be used, whether or not atmospheric testing will occur along with aviation over-flights and bombing runs. Will sonic booms rattle our homes and low flights of planes shake our houses and wake us up at night or crack our walls and foundations? I am also requesting complete documentation and information on Electronic Combat Training and how it will impact human health. Noise and electronic levels should also be made public.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-25	My freedom of information act request also includes the following questions:  1) Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year by all branches of the military services and in particular those participating in the Navy Warfare program under this E.I.S?  2) What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide your studies on these human, water, soil, marine life, and wildlife health effects. (Particulates are a pollutant under EPA laws and a human health hazard.)	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.  Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-26	3) Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in these programs? What types of weather modification experiments will be conducted by any branch of the military service (include NOAA and NASA), in conjunction with this Navy program?	No. Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-27	4) Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)? What impact will persistent jet contrails have on California climate? Will any branch of the military be flying at heights that leave persistent jet contrails be associated with the Navy Warfare Testing Program? If yes, please provide a	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.  Freedom of Information Act requests are handled separately from the NEPA comment process.

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	listing.	
Peterson R-28	5) A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website: http://www.epa.gov/oms/regs/nonroad/aviation/r99013.pdf)	The Navy's primary jet fuel is JP-5. Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-29	6) A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological h
Peterson R-30	7) A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-31	8) Toxicity of Red and White Phosphorus - humans, wildlife, soils, water	The potential impacts of all chemicals used in the proposed activities are

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	supplies, marine life.	found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
		Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-32	9) A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of ground-based and atmospheric	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
	obscurants which will be used in these programs and their toxicity.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-33	10) How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
	reimbursement be 100% if this program is initiated.	Freedom of Information Act requests are handled separately from the NEPA comment process.
	11) A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Peterson R-34	cumulative, bioaccumulation, and synergistic effects as well  12) Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies. Did the Navy violate NEPA with no notification or public hearings in Mendocino County, CA?	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-35	13) Will northern California Maxwell MOAs (Military Operation Areas 1, 2 & 3), be used in this Navy Project? If yes, what will be the actions taken over these area by all branches of the military?	No. Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-36	14) What effects will bomb blasts in the Pacific Ocean be on the San Andres and other California earthquake faults? I am requesting information on the number and intensity of earthquakes in Oregon since the Navy Warfare testing program was first implemented there. It should be noted that the E.I.S. does not address the multitude of sensitive earthquake faults in California and if their bombing, explosive detonations, and sonic booms could trigger more earthquakes in Oregon and California.	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
Peterson R-37	15) Since the Navy lists sonic booms as part of their program is the Navy or the Department of Defense going to reimburse residents of Idaho, Oregon, Washington, and California for the damages produced by these booms? In past years house walls and foundations have been cracked (along with mirrors and windows), due to sonic booms. California citizens should be reimbursed for any damages caused by these booms. Please note that Orange County in California and other surrounding areas were rocked by sonic booms on March 3, 2009, according to ABC news-southern California.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-38	A rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake, along with the human health effects and dead marine life. Many areas of California, Oregon, Washington, and Idaho would be contaminated from these experiments through airborne and water migration across these regions.	This comment has been duly noted.

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Peterson R-39	It also appears that nothing would be spared in testing weapons of war on the public (with the Nevada Test Site and Area 51 available for much of this testing and the Atlantic Ocean also available near Washington, D.C.). It appears that these Western States will be sacrificed for building and testing more weapons of mass destruction. Remember that sacrificing California, Washington, Oregon and Idaho is just the beginningyour state will be next.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Peterson R-40	My FOIA requests copies of all materials relied upon by the Navy and crucial to any evaluation of the E.I.S. I would also like all copies of the reports referenced in the E.I.S. used as a basis for all conclusions.  I request that the comment period be extended at least 60 days beyond the date of such records finally being provided. These comments are therefore preliminary and I reserve the right to submit further comments after the Navy has complied with the Freedom of Information Act.	Freedom of Information Act requests are handled separately from the NEPA comment process.
	If the Navy fails to provide these documents it will only show your own lack of confidence in your EIS. The Navy E.I.S. document currently reflects the Navy's competence in other areas of its job, such as the lack of navigation, chart or map reading, basic marine research, and anticipating the outcome of naval actions on marine life and human health.	
Peterson R-41	I am also requesting the following information in this E.I.S. public comment document and FOIA request:  1. Documents identifying the authors, contributors, and contractors who prepared this EIS. It is impossible for the public, our elected representatives, or even the Navy itself to trust the conclusions, factual validity, or integrity of the EIS (particularly given its near-total lack of scientific references as discussed below) without knowing the identity, credentials, academic qualifications and experience of the authors.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-42	2. All communications with governmental and outside agencies, in order to determine what, if any, objective critiques, scientific data, and advice were sought and received by the Navy Environmental Assessment(s) prepared by the Navy in accordance with Navy regulations 775.4 (d)(3) to prepare an environmental assessment in order to determine whether "preparation of an environmental impact statement is required." Obviously, such an environmental assessment would identify what activities the Navy was conducting and where and when, as well as what impacts were likely to be significant from which activities, none of which information is included in the EIS;	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-43	3. Records that would reveal where, how, and why the Navy's multiple, repeated failures of NEPA notification requirements occurred;	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-44	4. Records of the budget for this EIS, essential for both the public and our elected representatives to determine how much taxpayer money was wasted on a grossly incompetent EIS.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-45	5. FOIA request for the only two documents cited by the EIS in support of its conclusion of no significant impact on marine life or human health from the	Freedom of Information Act requests are handled separately from the NEPA comment process.

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	Navy's use and disposal of thousands of pounds per year of depleted uranium ordnance in offshore waters:	
	A. Hanson, W.C. 1974. Ecological Considerations of Depleted Uranium Munitions. Report LA-5559. Los Alamos Scientific Laboratory of the University of California. Los Alamos, NM. (citation Vol 2, p. 8-4 of EIS)	
	B. Toque, C. 2006. Marine Environmental Depleted Uranium Survey Report – Kirkcudbright Training Area - 2-4. Environmental Sciences Department, Institute of Naval Medicine. Gosport, UK. (citation Vol. 2, p. 8-5 of EIS).	
	6. As noted in my FOIA request, neither of these two studies was ever published in a peer-reviewed journal; whether they were ever published at all, in the sense of being made readily available to the public, is highly questionable. The 1974 Hanson study appears to be an unpublished report for the Atomic Energy Commission and diligent searches of multiple academic, scientific, and government data bases have failed to find it. Dedicated librarians at the Hatfield Marine Science Laboratory's Guin Library managed to find a copy of the Toque 2006 study, which was done for the British Royal Navy; it is a lengthy report, consisting primarily of boiler-plate language from previous reports, but most importantly it absolutely nowhere supports the Navy EIS claim of no uptake of uranium by marine organisms. In fact, what data the report contains utterly contradicts Navy claims <sup>1</sup> .	
	<sup>1</sup> The Toque study found heavy depleted uranium contamination in soil around land-based gun emplacements, in soil under the trajectory of the ordnance, and to a lesser degree in the sea water, sediments, and organisms of the bay where the ordnance fell - not at all the same situation as ordnance fired from shipboard guns and missiles and aircraft that spew firing residues directly into the water; furthermore, the study's methodology would not pass muster for even a high school science project. For example, the entire sampling of marine organisms consisted of a bucket of mussels and three lobsters; all uranium found in the shelled, cooked mussels was attributed by legerdemain to bits of shell that <i>might</i> have remained in the meat; and the high level of uranium in one of three lobsters was discounted entirely because the <i>mean level</i> of all three lobsters was below an arbitrary level of concern (except, of course, concern to the person who might eat that third lobster, but neither the Royal Navy nor our own apparently have any level of concern whatsoever for people who eat contaminated seafood).	
	Thus, the Navy relies solely on two unpublished, non-peer-reviewed reports, one of which is unavailable and the other totally irrelevant and contradictory to EIS claims regarding an extremely toxic, extremely persistent compound being released in unrevealed quantities into our waters. The Navy's claim of no significant impact from un-measured depleted uranium releases is therefore without any foundation. For this reason alone the EIS should be withdrawn and started over, with scientifically sound, relevant, peer reviewed, publicly available research supporting any Navy conclusion.  The Navy's reliance on nonexistent research invalidates EIS in its entirety	
Peterson R-46	For other metallic poisons discharged into Oregon waters, the EIS authors, narration supported occasionally by what can only be called unusual scientific	A new analysis is included in the Final EIS/OEIS that further describes the fate of hazardous materials. This new analysis gives the reader a better

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	notation. For example, see text and tables revealing Navy deposits of undisclosed quantities of chromium and chromium compounds into coastal waters at pp. 3.3-7; 3.3-9; 3.3-16; 3.3-17; 3.3-19; 3.4-15; and 3.4-24 of Volume 1.	framework within which to view the impacts of Navy materials used during training.
	The EIS authors acknowledge that chromium compounds along with other metallic poisons will be deposited in the sea as components of "vessels, manned and unmanned aircraft, bombs, shells, missiles, sonobuoys, batteries, electronic components, and as anti-corrosion compounds coating exterior metal surfaces." The authors conclude, with no references whatsoever, that these compounds "will settle to the bottom where they will lodge in deep sediments, eventually be covered by sediment, encrusted by chemical processes (e.g., rust), or covered by marine organisms (e.g., coral)." (EIS p. 3.3-7)	
	The authors further state that "seawater will eventually oxidize the expended training material into benign byproducts;" producing a faux reference not to a scientific paper or even to an unpublished report, but to another U.S. Navy environmental impact statement! (Vol. 2, p. 8-4: "DoN. 2008c. Draft Southern California Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement.)	
	In contrast to the authors' remarkable portrait of benign byproducts, a brief internet search for data on chromium and the chromium compounds listed in the EIS (barium chromate and lead chromate) brings up hundreds of references, to both scientific and regulatory documents, in which the commonest phrases are:	
	"profoundly toxic,"	
	"a known carcinogen, developmental toxicant, and reproductive toxicant;"	
	"very persistent in water;"	
	"high potential for bioconcentration of chromium in aquatic organisms;"	
	"highly toxic to aquatic organisms and can pose serious risk to humans;"	
	"highly toxic, corrosive, and carcinogenic;"	
	"may cause cancer and/or heritable genetic damage;"	
	"can make fish more susceptible to infection;"	
	"very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment."	
	Not a single one of the hundreds of references on chromium or chromium compounds includes the word "benign." The U.S. Navy, an extensive search shows, is the only entity to apply the word "benign" to chromium or chromium compounds - and the U.S Navy can cite only the U.S. Navy for its application of the word to so toxic a material. The EIS should be withdrawn and the process started over before this Naval Warfare testing program is allowed to start or expand in any state or the Pacific Ocean areas.	
Peterson R-47	It should be noted that unusual spiking is occurring in California drinking water supplies according to the California State Department of Health, Drinking Water Division (Sacramento, CA), water test data from across	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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	California. Could this increase in spikes be due to the increase in use of toxic chemicals in the Pacific Ocean areas and over land from the new, ongoing Navy Warfare testing programs?	Because no proposed activities take place over California, there would be no groundwater effects.
	1) A review of all water tests conducted in the State of California between 1984 and 2008, for every water test result over -0-, has been completed in the last year to find any unusual water contaminant readings which are over State of California standards and that could have negative consequences for human health.	
	2) The review demonstrated unusual new spiking patterns, across California, for some toxic drinking water contaminants that that raise concerns about air borne and other pollution sources. (Will the Navy be using any of the chemicals listed below in their Navy Warfare Testing Program?) This list includes, but is not limited to, the following contaminants:	
	Aluminum Barium Iron Manganese Magnesium Sodium Boron Arsenic Strontium Uranium Strontium-90 Antimony Beryllium Bromine Cadmium Calcium Copper Lead Nickel Silver Thallium Titanium Vanadium Zinc Sulfide Sulfate	
	Perchlorate, depleted uranium, Sulfur Hexafluoride (SF6), Phosphorus, Lithium, Rubidium, Silicon, Silica, Tin, Titanium, Tritium, Tungsten, White Phosphorus, Red Phosphorus, and Yttrium are not currently being tested for in California Drinking Water Supplies and should be added to the list of chemicals tested by the State of California due to health effects associated with exposure. Many of these same contaminants are showing up in California State Air Resources air testing results throughout many parts of California. Neonicotinoids should also added to the list of water contaminants as they may be responsible for Honey Bee and other pollinator declines. (Note that carbon black and silver iodide should be also added to this list.)	
Peterson R-48	The U.S. Navy should be required to pay California as reimbursement for including all of the Navy toxic listing of chemicals in required water and air testing. In addition, increased water, soil, and air testing should be required and paid for by the U.S. Navy in order to protect the citizens in the "warning areas". The failure of the Navy to notify the California Slate Department of Health and the California Air Resources Board also shows that the Navy is in violation of NEPA and Proposition 65.	No activities take place over California.
Peterson R-49	EIS authors acknowledge that toxins such as uranium and chromium are not just released into air and water by explosions of Naval guns, missiles, and bombs. They also note that chromium, chromium compounds, depleted uranium, and other hazardous metals and compounds are also released into the ocean when artillery shells, grenades, high explosives, rockets, and submunitions <sup>2</sup> fail to explode and sink to the bottom. Table 3.3-3 on p. 3.3-8 shows that nearly 5 percent of all military ordnance fails to explode. <sup>2</sup> Any munition that, to perform its task, separates from a parent munition. Dictionary of Military and Associated Terms. US Department of Defence 2005.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  The tables have been re-titled to reflect that all expenditures are annual.
	"Under the No Action Alternative," the authors announce, "a total of 25,856 naval gunshells would be expended over an ocean area of approximately	A new analysis is included in the Final EIS/OEIS that further describes the fate of hazardous materials. This new analysis gives the reader a better

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	122,400 nm²." Astonishingly, as emphasized in my February 15 preliminary comments, the EIS absolutely nowhere says whether those figures are per day, par month, per year, or for how many years past. Assuming for the sake of the authors' immortal souls that the figures are per year, that would mean some 1,292.8 pieces of unexploded ordnance sinking to the ocean floor every year for an undisclosed number of years. From each of these, according to the EIS), would leach every year undisclosed quantities of barium chromate, potassium perchlorate, phosphorus, titanium compounds, depleted uranium, lead oxide, lead chromate, ammonium perchlorate, fulminate of mercury, and lead azide.	framework within which to view the impacts of Navy materials used during training.
	That these are hazardous materials the authors note, but then conclude, yet again with absolutely no references or proof whatever: "However, the hazardous constituents decompose slowly, so existing ocean and tidal currents would dissipate these materials to undetectable levels."	
	Obviously, the EIS authors never troubled to do even a minimal search, which would have brought up numerous articles on highly toxic carcinogenic compounds leaching from unexploded ordnance in sea water, and uptake by marine organisms of such toxins. Some of this research was even done by, for, or in spite of the U.S. Navy in waters off of Vieques, which had been pounded by Navy "training" and "testing" exercises for decades. The EIS nowhere even mentions worldwide concern over the extreme and growing hazard of unexploded ordnance in aquatic environments, as evidenced by international scientific meetings convened specifically to address this issue. See, e.g., "Cancer-causing Toxins Linked to Unexploded Munitions," Science Daily, February 18, 2009; also see U.S. Congressman Earl Blumenauer's UXO (unexploded ordnance) Caucus.	
	The EIS authors' omission of critical information on where and for how long it's No Action Alternative actions have been depositing incredibly toxic materials into our ocean amounts to fraudulent concealment of hazards which the Navy knows or should have known could have serious, significant impacts on marine ecosystems and the humans who depend on them. Indeed, the total failure to address this issue strongly suggests an EIS written to support a pre-ordained proposal, assiduously leaving out inconvenient facts that contradict pre-ordained conclusions. The EIS should therefore be withdrawn and the NEPA process started over again.	
Peterson R-50	While the EIS authors acknowledge the phenomenon of synergism, they apparently labor under the incorrect assumption that the word applies only to sonar. Should they actually read the wealth of research on the numerous toxins the Navy dumps with abandon into coastal waters, they would see many references to synergistic effects among different compounds. Lest the authors have forgotten or never knew, synergism occurs when the effects of two or more chemicals combined are greater than and/or different from the sum of their effects separately. Many references for chromium and chromium compounds, for example, emphasize that their extremely toxic effects are susceptible to synergism with other elements and conditions, particularly in aquatic systems. This information is not cited in the E.I.S. The E.I.S failure to address synergism among the pollutants it produces further invalidates its	The training activities analyzed in the EIS/OEIS include actions that generate expended materials (shell casings, sonobuoys, mobile targets) that are not retrieved after use. These objects have been used for their intended purpose, generally in areas greater than 50 nm from shore and in waters 6,000 feet (1,000 fathoms) deep or more. The Navy does not "dump" materials into waters of the U.S. In addition, none of the current or proposed activities take place in or near the mouths of rivers. The EIS (Section 3.4 Water Resources) acknowledges that contaminants, including metals, synthetic organic compounds, pesticides, and pathogens, are present in the marine waters of the Pacific Northwest. However, the presence of these materials is unrelated to naval activities.

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	stunning array of unfounded conclusions.  The failure to address synergism is further compounded by the total failure to address the already compromised aquatic environment of coastal Pacific waters, or how all of the Navy's supposed alternatives would exacerbate such pre-existing conditions. A brief search shows that numerous government reports and scientific studies have raised serious concerns about the levels of pollutants being flushed into the ocean by Pacific river systems. The Columbia River, for example, carries toxic loads of dioxins, PCBs, pesticides, radionucleides, heavy metals and other toxins into the ocean (see, e.g., "Columbia River toxins moving up food chain," by Craig Welch, Seattle Times, July 10, 2008), where currents and winds carry them to our beaches and coastal waters both north and south of the river mouth. (see, e.g., Paul D. Komar, The Pacific Northwest Coast: Living with the Shores of Oregon and Washington, 1997) Other studies have periodically found similar contaminants in other coastal rivers. The EIS failure to address the existence of these well-known pollutants thus omits mention of any synergistic or additive effects of mixing them with the Navy's toxic effluvia, or of how Naval explosions will stir up poisons such as dioxins, PCBs, and heavy metals lodged in sediments and disperse them into the marine environment.  The Navy authors' apparent assumption that Navy activities occur in a	Analyses of the components released from explosives and other expended materials can be found in section 3.3 Hazardous Materials. A full description of the compounds is included, along with their fate and transport, acknowledgement of data gaps, and areas where effects are not clearly known. Section 3.4 Water Resources, includes detailed discussions of how these components interact with seawater and sediment (when known) and the concentrations at which components are known to have ill effects. None of the proposed actions would result in exceedances of EPA water quality criteria.
	pristine, untouched environment is a dangerous and extremely foolish fiction, compounded by the equally dangerous and foolish assumption that synergism does not occur among Navy pollutants and pre-existing poisons. In addition, coastal waters are also subject to polluted runoff, waste water effluent, and other toxic contamination from land based sources. Fiction and false assumptions have no place in environmental impact statements.	
Peterson R-51	In addition, there has not been time to critique the EIS's lengthy discussions of sonar impacts and explosion damage to marine organisms; a brief skim of those sections, however, indicates that they were prepared without valid scientific studies and or any other type of scientific and reviewed documentation.  The EIS's gross omissions, false references, nonexistent references, and blatant, repeated assumptions based on no references at all render the document entirely invalid, both scientifically and legally. The EIS) should therefore be withdrawn and the entire proposal re-examined and begun from scratch, with qualified personnel clearly identified and the public adequately informed and involved from the start.	The potential of the proposed sonar activities to impact marine organisms has been completely and thoroughly analyzed in Chapter 3 of the Draft EIS/OEIS. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. Any claim of inadequacy of this analysis is baseless.
Peterson R-52	There are a series of issues which are not addressed in the E.I.S:  1) Will the U.S. Navy be using JP-8 and other toxic additives to produce obscurant smoke clouds? (See Attachments A & B & F)  2) Will the Navy be deploying Obscurant smoke? If yes, what is the chemical composition of such smoke and what is their toxic impact on the environment? What protection will be given to U.S. Coast Guard personnel and troops in the area of said tests? (See Attachment C & S)  3) Will the Navy be using Rapid Obscuration Systems? If yes, what type of	JP-5 is the Navy's primary jet fuel. JP-8 is most commonly used by the U.S. Air Force. The Navy is not proposing the use of any obscurant smoke or systems.

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	chemicals will they be using and where will it be released? (See Attachment D)	
Peterson R-53	4) Will the Navy be using paintball guns and what payload and toxic chemicals will they be using? (See Attachment E)	Yes, commercial paint balls are occasionally used for small unit ground training in the NAS Whidbey Island Survival Area. The paintballs are made of non-toxic light vegegable oil and an inert dye.
Peterson R-54	5) I am requesting a copy of the "Screening Level Ecological Risk Assessment of some Military Munitions and Obscurant -related Compounds for Selected Threatened and Endangered Species". (See Attachment G)	Freedom of Information Act requests are handled separately from the NEPA comment process.
Peterson R-55	6) Will the Navy be using Obscurant Fog Oils? What environmental and health effects are associated with these Fog Oils? (See Attachment H & I)	The Navy is not proposing the use of any obscurant smoke, oils, or systems.
Peterson R-56	7) Will the Navy be using Obscurant Graphite Flakes? What are the toxic health and environmental effects of Graphite Flakes and mixed aerosols? (See Attachment J & L)	The Navy is not proposing the use of any obscurant graphite flakes or systems.
Peterson R-57	8) Will the Navy be using Emissive Smokes or Flares? What chemicals are these items composed of and what are the environmental and human health impacts? (See Attachment K)	Various pyrotechnics and spotting charges are proposed for use in the NWTRC. The components of these items are shown in Table 3.3-4 of the Draft EIS/OEIS.
Peterson R-58	9) The Navy E.I.S. states that White Phosphorus (+felt smokes), and Red Phosphorus will be used in this Navy Warfare Testing Program. What is the toxicity level for mammalian and Aquatic Organisms? What is human health toxicity? Will the U.S. Coast Guard and Navy personnel be required to wear protection masks when this chemical is used? What precautions will be used to protect marine life and fisherman from this usage? How will these chemicals move from water usage when blown over lands areas? How will it impact human Health when these clouds move over land areas? (See Attachments M, N, 0 & Q)	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  The EIS does <u>not</u> state that white phosphorus or felt smokes are used. Red phosphorus is used in some markers and flares as described on page 3.3-19 of the Draft EIS/OEIS. The fate of red phosphorus, either consumed during use, or residue left behind in the ocean, is also described in this section. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Peterson R-59	10) Will the Navy be using obscurants over land areas? If yes, what is the type of chemicals that will be used and what is their toxicity? (See Attachment P)	The Navy is not proposing the use of any obscurant smoke or systems.
Peterson R-60	11) What is the assessment of Fog Oil Deposition During Military Training Exercises used by the Navy? What are the environmental and health effects + types of toxics used in these programs? (See Attachment R)	The Navy is not proposing the use of any obscurant smoke, oils, or systems.
Peterson R-61	The Navy EIS fails to meet the requirements of the National Environmental Policy Act (NEPA) in at least five major respects, anyone of which warrants withdrawal of the entire EIS and cancellation of the actions proposed therein. The five major failures identified so far are:  1) Failure to identify past, current and future activities in the waters off Oregon and northern California, which comprise most of the area involved in the EIS;	The Draft EIS/OEIS fully meets the requirements of NEPA in every respect.  The past and current activities are clearly identified in the No Action Alternative. The proposed future activities are identified in Alternatives 1 and 2.
Peterson R-62	Total failure to support a finding of no significant impact for Oregon and northern California waters;	The conclusions in the Draft EIS/OEIS are fully supported by a thorough analysis of the best available science.
Peterson R-63	3) Repeated assumptions of no impact based on absence of data, and	Pertinent references were used throughout the document. The Draft

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	repeated findings of no significant impact unsupported by either data or references;	EIS/OEIS references over 1,000 independent scientific studies and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was considered in the analysis.
Peterson R-64	4) Blatant failure to examine obvious and feasible alternatives such as reducing or eliminating all testing and training actions in the area; and	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Peterson R-65	5) Monumental failure to notify the public or concerned parties from the outset, precluding meaningful review and comment at any stage of EIS development.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Peterson R-66	6) Because the EIS purports to discuss environmental impacts of Navy activities in an area encompassing the entire Oregon coastline and part of northern California, territorial waters, and beyond, its failure to identify those activities precludes meaningful comment and invalidates all conclusions of no significant impact, rendering the entire document invalid.	The Draft EIS/OEIS fully meets the requirements of NEPA in every respect.  The past and current activities are clearly identified in the No Action Alternative. The proposed future activities are identified in Alternatives 1 and 2.
Peterson R-67	7) A "no action" alternative should, as the name implies, mean no action. In Navy parlance, however, the Navy's deceptively named "No Action" alternative reveals that "no action" actually means to continue activities which the Navy claims to be already conducting off the Oregon coast; however, the EIS nowhere identifies what those current activities are, where they are occurring, for how long they have occurred, or what environmental impacts of those activities have already accrued; furthermore, the EIS nowhere identifies any previous environmental assessment or environmental impact statement describing/identifying these current and past activities or discussing their environmental impacts.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).  The past and current activities are clearly identified in the No Action Alternative.  This EIS marks the first time the Navy has taken a range complex approach at complying with NEPA on the NWTRC. Previously, NEPA requirements were met by conducting environmental analyses on individual platforms and weapons systems.  The Navy believes this range complex approach will provide a more accurate analysis of the impacts of Navy training.
Peterson R-68	8) The question of past and current Naval activities is highly significant. For example, the EIS acknowledges that past and present activities off the Oregon coast have involved the use of rounds comprised of depleted uranium. Uranium, depleted or otherwise, is an exceptionally persistent material in the environment. The EIS revelations of Navy use of depleted uranium thus raise very serious concerns about how long the Navy has been using depleted uranium rounds in the Pacific Ocean, how much was used per year, where that use has occurred, and what environmental impacts have already accrued from such use, such as uptake by fish and synergistic effects with other wastes and products from Naval exercises. The EIS mentions none of these issues.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom

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		would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Peterson R-69	9) As current activities off the Oregon coast and the California coast are not covered in this or any environmental impact statement or assessment, such activities are therefore unlawful and the Navy should immediately desist from all activities of any kind in waters from the Oregon coast to the 250-mile limit until such time as valid environmental documents, addressing all current and past activities and their effects, have been prepared and adequately made public to the people of Oregon and California.	NEPA requirements were previously met by conducting environmental analyses on individual platforms and weapons systems.
Peterson R-70	10) The EIS states that its proposed action "may have coastal effects" in the state of Washington, but that "For the States of Oregon and California, the Navy has determined that its Proposed Action will have no coastal effects." (The coastal zone extends 3 nautical miles seaward from the shoreline.) The EIS absolutely nowhere describes either what the proposed action is or will be in Oregon and California coastal waters, or what the effects of the unnamed proposed action will be in those waters. For example, see Table 4-2, pp. 4-3 to 4-7, "Past, Present and Planned Future Projects in the Offshore Area," which does not include a single project identified for Oregon or northern California. For further example, the word "Oregon" occurs on some 106 pages in Vol. I of the EIS, and on 23 pages of Vol. II; on at most only five (5) of those pages does the phrase "no significant impact" also occur, and on none of these five pages are any specific actions or locations mentioned. The Navy EIS determination that the Proposed Action will have no coastal effects	The activities proposed for the "Offshore Area,"—defined in Chapter 2 as the ocean area off the coast of Washington, Oregon, and California—could occur at any location in the area. The Final EIS/OEIS has been revised to clarify that the majority of these offshore activities occur off the coast of Washington, and decreasing in occurrence in the southern part of the Offshore Area.  Typically, these activities occur within the W-237 areas, beyond 12 nm from shore. On occasion, these activities may take place outside W-237. These occurrences would decrease in frequency moving southward in the Pacific Northwest Operating Area. Off the coasts of Oregon and northern California, training within 12 nm from shore seldom, if ever, occurs. No explosives training occurs within 3 nm of Oregon and California

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	in Oregon and California is therefore arbitrary, capricious, and entirely unsupported by any evidence whatsoever. The entire EIS should be withdrawn for that reason alone.	
Peterson R-71	11) Throughout the entire EIS, the Navy exhibits a blatant don't look, don't tell policy toward environmental effects, using an absence of data to justify an assumption that no effects occur. For example, see p. 3.6-15, "The study area for consideration of impacts on marine plants and invertebrates includes the open ocean west of Washington, Oregon, and northern CaliforniaAircraft overflight and training activities are assumed to have no impacts to marine communities, because impacts of sound on plants and invertebrates are unknown and difficult to quantify." Similarly, the EIS repeatedly states a finding of no significant impact totally unsupported by data or even references, e.g., Tables ES3 Summary of Effects - Geology and Soils; and ES-4 Summary of Effects - Air Quality, which typically conclude, with no data, first that the impacts would be the same as Alternative 1 (for which no specific activities, locations, or impacts were described for Oregon or California), and second, that no significant impacts would therefore occur.	The Final EIS/OEIS has been revised to include a discussion of invertebrate hearing, and sound impacts to invertebrates.  The Executive Summary and was meant to provide only an overview of the impacts, not a repeat of the thorough analysis conducted in the resource analysis section. The data supporting the Executive Summary conclusions can be found in the corresponding sections within the main body of the EIS/OEIS.
Peterson R-72	12) The EIS fails to examine or consider such obvious and feasible alternatives as reducing or eliminating all training and testing activities in the ocean and territorial waters off Oregon and northern California.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Peterson R-73	13) From the outset, the monumental failure of the Navy to notify the public or concerned parties of its proposed actions totally precluded meaningful public participation, review, and comment. The Navy's sole public notice of the 2007 notice of intent/scoping phase of this EIS was placed in a single Oregon newspaper, the News Guard, a small weekly in the coastal town of Lincoln City read by very few people outside the immediate vicinity of Lincoln City, thus depriving most of the state and entire coast of any notice whatsoever.  According to the EIS, notice of publication of the current draft EIS was placed in the same paper in December, 2008, announcing a public meeting January 30 in South Beach (not Depoe Bay, as the EIS states). However, the editor of the News Guard emphatically reported that the paper received no such notice whatsoever and knew nothing of the public meeting until after it occurred. Although the Navy placed small, almost invisible, unreadable ads in a Newport newspaper prior to the meeting3, every person who attended - including the Newport paper's reporter stated that they learned of it only through word of mouth. Thus a meeting and publication of vital importance to the entire state and especially its 362-mile coastline, was to all intents and purposes a well-kept secret, regardless of Navy protestations to the contrary. The EIS and the proposals the Navy has devised should therefore be withdrawn and the entire process started over from scoping notice on.  1 Note also that online versions of said papers (in which Navy had placed ads of open house/hearing) do not carry all of the advertising present in the hard copy. Therefore, notice was even more limited than expected, because it was limited to readers who had access to a hard copy of the paper, thus reducing notice to a much smaller	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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	potential population than might otherwise be expected in these Internet days. The Navy's failure to even investigate this possibility, let alone compensate for it by utilizing the many other easily available & inexpensive methods of providing adequate public notice of the issuance of the scoping process & EIS, provides additional support for an immediate finding of failure to comply with NEPA & the Navy's own regulations implementing NEPA and the conclusion that the EIS should be withdrawn & the scoping process restarted. This time with appropriate compliance with NEPA.  In addition, it is alleged that NEPA was violated by the Navy with regard to notice and the public hearing held in Humboldt County, CA.  [FOIA request attached]	
	[Several other attachments included]	
	This is my second public comment response to the U.S. Navy Environmental Impact Statement (E.I.S.). This letter is my public comment statement, along supporting letters and documentation that I wish added to the public comment record.	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
Peterson R-74	1) I first learned time I learned about the Navy E.I.S., was on February 17, 2009. The public in Mendocino County, California, was not notified about this E.I.S. proposal by newspaper or any other public media, such as radio advertising. Therefore, we feel that this has been a violation of NEPA laws and that the review period for the E.I.S., should be extended and U.S. Congressional Hearing on this subject should be immediately commenced. 2) The United States Navy held a public hearing In Mendocino County, Ukiah, CA, on March 31, 2009. The hearing was first made public on Friday, March 27, 2009, which did not give Mendocino County residents adequate time to take time off from work to travel hundreds of miles to this hearing location during work hours. (See Attachment 1 & 1A)	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.  The meeting in Mendocino County was not a Navy meeting or part of the NEPA process. Therefore, notification of the meeting was not the responsibility of the Navy.
	3) The U.S. Navy personnel at this meeting made it clear that most of the training would not be conducted in Oregon or California but in the State of Washington. What guarantee do we have, in writing, that this was a true statement by the Navy personnel at this meeting?	The activities proposed for the "Offshore Area,"—defined in Chapter 2 as the ocean area off the coast of Washington, Oregon, and California—could occur at any location in the area. The Final EIS/OEIS has been revised to clarify that the majority of these offshore activities occur off the coast of Washington, and decreasing in occurrence in the southern part of the Offshore Area.
Peterson R-75		No explosives training occurs within 3 nm of Oregon and California
T etersorrie-73		The statements made by Navy personnel at the meeting have been added to the Final EIS/OEIS:
		"Typically, these activities occur within the W-237 areas, beyond 12 nm from shore. On occasion, these activities may take place outside W-237. These occurrences would decrease in frequency moving southward in the Pacific Northwest Operating Area. Off the coasts of Oregon and northern California, training within 12 nm from shore seldom, if ever, occurs."
Peterson R-76	4) The DVD of the March 31, 2009, Board of Supervisors - Navy Public	The DVD has been included in the admin record.
1 0101301111-70	Hearing, is provided to you today with the request that it be made part of the	The informational meeting conducted by the Mendocino County Board of

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	public record and the questions of the participants and speakers in this meeting be answered in the Navy E.I.S. (See Attachment B)	Supervisors was not part of the NEPA commenting process, and there was no court reporter to transcribe the discussion.
		To be accepted, comments were to be in written form or provided orally and transcribed by court reporter at one of the six public hearings. The Mendocino meeting was not one of the six public hearings, and the DVD is not in an acceptable format for a comment. Therefore the comments and discussions contained on the DVD will not be responded to in this EIS.
Peterson R-77	5) The Navy stated within the March 31, 2009, hearing that they would not be harming or killing many marine mammals, if anythus, we are requesting that the Navy address this issue in light of the NOAA, U.S. Department March 11, 2009, Federal Register Notice, with the Navy asking for a permit to "take" 32 species of marine mammals (2.3 million per year, each year-per Congressman Thompson's letter dated March 12, 2009, to Dr. Jane Lubchenco, NOAA). (See Attachment C &C-1 &C-2)	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act (MMPA); the term does not reflect a marine mammal death.  The Draft EIS and NOAA permit request are for 129,570 annual MMPA Level B takes and 13 MMPA Level A takes, not 2.3 million.  Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Peterson R-78	6) Please note that sonar is the only harm that the Navy claims with regard to Marine Mammals. However, explosions, debris, chemicals and other airborne pollutants all will have negative impacts on animals, marine mammals, fish, water quality, soils and air quality. The Navy fails to address these issues by not asking for a permit to "take" marine mammals by these methods. In addition, weapons explosions will harm aquatic life.	An analysis of each of these stressors was considered in the Draft EIS/OEIS. The analysis concluded that no harm or harassment would occur to any marine mammal from sources other than sonar and underwater detonations, therefore, no take permit was requested except for sonar and explosive activities. Please see Table 2.9-11 in the Draft EIS/OEIS for more information on estimated exposures due to underwater detonations.
Peterson R-79	7) I am enclosing the April 5, 2009, letter from Ava Peterson to Ms. Susan Rice, Permanent Representative of the United States of America to the United Nations for addition to the public comment portion of the E.I.S. In this letter Ms. Peterson states that the "taking" of marine mammals in the Navy Warfare Testing Expansion could lead to increased tensions throughout the world as marine mammals are part of the world's food supply and also support the tourism and fishing industry of many countries including the coastal areas of the United States.  This action by the United States Navy could cause an escalation of worldwide testing programs by other nations that would endanger more marine mammal around the world and thus cause problems with increased stresses on other natural resources to feed these populations. The concerns and questions addressed in this letter should be answered by the Navy and attached as part of the public comment record.(Attachment D)	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The Draft EIS/OEIS analysis concludes there would be no impact to the stock of marine mammals.  Political events occurring around the world are outside the scope of this EIS/OEIS.
Peterson R-80	8) The Navy "Extent Map" on E.I.S. Page ES-2 shows that all of Oregon, Washington, part of Idaho, almost all of Northern California, and part of Nevada is under a warning area. Please see the highlighted area on Exhibit E. Why would these entire areas be designated as "warning areas" and what	The extent map referred to in the comment has a color scheme that led to confusion about the range boundaries. This figure has been revised in the Final EIS/OEIS to remove any confusion.  No land areas outside the state of Washington are included in the

is the definition of "warning area"?  NVTRC ESIOCEIS study area. The only apragace over a state other than Washington is a 50 nm" pince of a follitary Operating Area that extends over northwestern lidaho.  Peterson R-81  Peterson R-82  Peterson R-83  Peterson R-83  Peterson R-84  Peterson R-85  Peterson R-85  Peterson R-85  Peterson R-85  Peterson R-85  Peterson R-86  Is the definition of "warning area"?  Name witten two articles on the Navy E.I.S. warfare expansion. I would like them added to the public comments record and the questions therein be answered in the Navy E.I.S. (See Attachment F - Article: February 21, 2009 & Article: March 28, 2009)  In the expansion Since of the Peterson 28, 2009  In the expansion Since proper NEPA nollification was not given to the region other complexes and ranges.  In the expansion Since proper NEPA nollification was not given to the have public and U.S. Congressional hearings on this proposal along with the Navy request to have NoA-grant a permit for the Taking' of martine mammals. (See Exhibits G & H)  In the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the sir or on the ground is an extensive list. Many of these chemicals and the symergistic impacts that they will have in the areas they will be used in the occan, on land, and also as airborne pollutants. The Navy E.I.S.	ID	Issue Text	Response Text
Peterson R-81    Peterson R-82   Peterson R-84   Peterson R-85   Peterson R-85   Peterson R-86   Peterson R-88   Peterson R-88   Peterson R-88   Peterson R-88   Peterson R-88   Peterson R-88		is the definition of "warning area"?	Washington is a 60 nm <sup>2</sup> piece of a Military Operating Area that extends
Peterson R-81  Peterson R-82  Peterson R-83  Peterson R-84  Peterson R-84  Peterson R-85  Peterson R-86  Peterson R-86  Peterson R-86  Peterson R-86  Peterson R-86  Peterson R-86  Peterson R-87  Peterson R-88  Peters		like them added to the public comments record and the questions therein be answered in the Navy E.I.S. (See Attachment F - Article: February 21, 2009	The comments contained within the attachments have been responded to
technical language" without providing through a FOIA request copies of reports, studies, or other materials used by the Navy in making their E.I.S. case for this expansion. Since proper NEPA notification was not given to the residents of Mendocino County, CA and other Northern California counties, we are requesting additional time to comment on the current E.I.S., and to have public and U.S. Congressional hearings on this proposal along with the Navy request to have NOAA grant a permit for the "taking" of marine mammals. (See Exhibits G & H)  11) It should be noted that the long listed of hazardous materials to be used in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, solls, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the ocean, on land, and also as airborne pollutants. The Navy E.I.S. should address all of these issues.  Peterson R-84  Peterson R-85  Peterson R-85  Peterson R-86  Peterson R-8	Peterson R-81	&Article: March 28, 2009)	EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already
have public and Ü.S. Congressional hearings on this proposal along with the Navy request to have NOAA grant a permit for the "taking" of marine mammals. (See Exhibits G & H)  11) It should be noted that the long listed of hazardous materials to be used in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have in the areas they will be used in the synergistic impacts that they will have a single facts and assertions and onit those that don't comply with normal scientific research and peer-reviewed	Peterson R-82	technical language" without providing through a FOIA request copies of reports, studies, or other materials used by the Navy in making their E.I.S. case for this expansion. Since proper NEPA notification was not given to the	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could
Navy request to have NOĀA grant a permit for the "taking" of marine mammals. (See Exhibits G & H)  11) It should be noted that the long listed of hazardous materials to be used in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the ocean, on land, and also as airborne pollutants. The Navy E.I.S. should address all of these issues.  Peterson R-84  Peterson R-84  Peterson R-85  Peterson R-85  Peterson R-86  Navy request to have NoĀA grant a permit for the "taking" of marine mammals. (See Exhibits G & H) is the proposed in the long listed of hazardous materials to be used in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S does not address all of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S does not address all of these components released from explosives and other expended materials can be found in section 3.3 Hazardous Materials. A full description of the compounds is included, along with their fate and transport, acknowledgment of data gaps, and areas where effects are not clearly known. Section 3.4 Water Resources, includes detailed discussions of how these components interact with seawater and sediment (when known) and the concentrations at which components are known to have ill effects. None of the proposed actions would result in exceedances of EPA water quality criteria.  Peterson R-84  12) It appears that the Navy is using documents of unpublished, non-peer reviewed studies upon which to base their conclusions. It is time for the Navy E.I.S. fails to identify these baseline activities and scentific research and peer-reviewed studies			Mendocino County and its coastline are outside of the range complex.
in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the ocean, on land, and also as airborne pollutants. The Navy E.I.S. should address all of these issues.  Peterson R-84  Peterson R-85  Peterson R-86  In the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the ocean, on land, and also as airborne pollutants. The Navy E.I.S. should address all of these issues.  Peterson R-86  Peterson R-87  Peterson R-88  In the air or on the ground is an extensive, all of these compounds is included, along with their fate and transport, acknowledgement of data gaps, and areas where effects are not clearly known. Section 3.4 Water Resources, includes detailed discussions of how these components interact with seawater and sediment (when known) and the concentrations at which components are known to have ill effects. None of the proposed actions would result in exceedances of EPA water quality criteria.  Petrient references were used throughout the document. The Draft EIS/OEIS references over 1,000 independent scientific studies and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was considered in the analysis.  Peterson R-86  13) There are many questions about the "NO ACTION" alternatives. The E.I.S. fails to identify these baseline activities and scientific studies used for their assertions.  14) The Navy E.I.S. makes environmental evaluations which have little basis in fact and appear to be based on assertions rather than scientific and peer-r		Navy request to have NOAA grant a permit for the "taking" of marine	
Peterson R-84  Peterson R-84  Peterson R-85  Peterson R-86  Peters	Peterson R-83	in the air or on the ground is an extensive list. Many of these chemicals are harmful to man, mammals, birds, all marine life, coastal areas, soils, water, and air quality. The Navy E.I.S. does not address all of these chemicals and the synergistic impacts that they will have in the areas they will be used in the ocean, on land, and also as airborne pollutants. The Navy E.I.S. should	expended materials can be found in section 3.3 Hazardous Materials. A full description of the compounds is included, along with their fate and transport, acknowledgement of data gaps, and areas where effects are not clearly known. Section 3.4 Water Resources, includes detailed discussions of how these components interact with seawater and sediment (when known) and the concentrations at which components are known to have ill effects. None of the proposed actions would result in
Peterson R-85  appears on the surface to be almost as bad as the other alternatives. The E.I.S. fails to identify these baseline activities and scientific studies used for their assertions.  The Draft EIS/OEIS.  the Draft EIS/OEIS.  This comment has been duly noted.  This comment has been duly noted.	Peterson R-84	reviewed studies upon which to base their conclusions. It is time for the Navy to use only peer-reviewed, scientific studies for their facts and assertions and omit those that don't comply with normal scientific research and peer-	EIS/OEIS references over 1,000 independent scientific studies and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was
Peterson R-86 in fact and appear to be based on assertions rather than scientific and peer-reviewed studies.	Peterson R-85	appears on the surface to be almost as bad as the other alternatives. The E.I.S. fails to identify these baseline activities and scientific studies used for	
Peterson R-87 15) The Navy does not want to provide critical documents upon which their This comment has been duly noted.	Peterson R-86	in fact and appear to be based on assertions rather than scientific and peer-	This comment has been duly noted.
	Peterson R-87	15) The Navy does not want to provide critical documents upon which their	This comment has been duly noted.

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	assumptions are based. These documents should be immediately released to the public or the assumptions based on these documents should be removed from the Navy E.I.S.	
Peterson R-88	16) The E.I.S. falls to identify the type of experiments that will be conducted in the coastal Pacific Ocean waters off Oregon and California. This is another failure of the Navy E.I.S.	The proposed action includes no testing (experiments) of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Peterson R-89	17) The absence of scientific data and reports leads one to believe that the Navy is relying on inferences and opinions in their conclusions with regard to the escalation and expansion of their warfare testing program. Unless the Navy is willing to provide such data it appears that the conclusions In the E.I.S. Is highly suspect of being inaccurate and based on opinions rather than sound scientific data and peer-reviewed studies.	Pertinent references were used throughout the document. The Draft EIS/OEIS references independent scientific studies and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was considered in the analysis.
	My Navy FOIA request for documents remains unanswered so I am enclosing a copy of my request for documents to be put into the public comment record. This request was submitted online on February 18, 2009.	The FOIA request is a separate process.
Peterson R-90	The above comments and questions are just part of the whole story. There are some many inaccurate statements, emissions, and false references that it makes the entire E.I.S. Invalid.	
reteison K-90	Thus, the Navy should scrap this E.I.S. (withdraw it), and re-examine this entire issue from the beginning in order to protect the public, our air, water and soil quality, and the aquatic life rein. Our tourism and fishing industries need protection as well from these programs.	
	The violation of NEPA Is a prime example of the Navy's indifference in protecting the public.	
Pettis-01	I have fished the waters off central Oregon for 30+ years. In that time I have seen hundreds of marine mammals including orca whales, blue whales, grey whales, humpback whales, stellar sea lions, California sea lions, elephant seals, Dahl's porpoise, bottle nose porpoise, pilot whales, and numerous others I could not identify. Surely this area of abundant life is not the best are to be setting off bombs and running high intensity sonar. In addition to this fact I am concerned about losing fishing opportunity to either restricted access or reduced populations due to Navy activity in traditional fishing grounds that are very important to our economic survival. Please consider other options for areas of operation.	This comment has been duly noted. The Navy's proposal is designed to accommodate the necessary training while minimizing impacts to marine life using the best available science, as discussed and analyzed in this EIS/OEIS.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Concerning restricted access, there are no restricted areas in the
		NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference with their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.

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Pio J-01	Do not do what you are planning to do. Be the change.	This comment has been duly noted.
Pio S-01	Please keep our ocean waters safe for all sea life. Whales are not the only ones that will be affected. NO MORE WAR!	This comment has been duly noted.
City of Point Arena (Point)-01	We are writing to express our opposition to the Navy's Northwest Training Range Complex as described in the Environmental Impact Statement (EIS), and Overseas Environmental Impact Statement (OEIS) for the U.S. Navy Weapons Testing Program. We are, concerned that the relevant documents, do not adequately describe existing environmental conditions, baseline training operations or, future training operations. Further, we do not believe that the environmental and cumulative impacts are properly analyzed and therefore it is not surprising that the proposed mitigation measures are inadequate to protect marine mammals and other marine species. We are particularly concerned about the unnecessary and preventable impacts to fisheries and marine mammals.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  See responses to specific comments below.
Point-02	We believe the EIS is environmentally deficient for the following reasons:  1) Incomplete data. The EIS contains only a small amount of data regarding existing environmental conditions, baseline data for populations of marine mammals and fish species, baseline data for existing training activities and impacts to marine species, as well as projected impacts of future training activities.	The Draft EIS/OEIS fully meets the requirements of NEPA in every respect.
Point-03	2) Environmental impacts. The Navy does not properly analyze environmental impacts that its sonar training will likely have on the endangered species and species in general. For instance, it completely disregards the serious impacts its sonar training will have on the highly endangered Southern Resident killer whale, whose critical habitat in or around Puget Sound would be subsumed by Naval training. Likewise, it doesn't consider impacts on the Olympic Coast National Marine' Sanctuary, almost all of which will be engulfed by naval training. At a minimum, these areas should be protected from sonar training.	The EIS/OEIS contains a full and thorough analysis of the environmental impacts of the Navy's proposed activities.  The Navy's training would in no way "subsume" the killer whales critical habitat. The Navy conducts very few activities, and no mid-frequency sonar training, within the Puget Sound.  Potential impacts to sanctuary resources are considered throughout the EIS/OEIS.
Pont-04	We are concerned that the Navy has adopted methodologies that are not accepted in the scientific community while at the same time ignoring relevant information that favors a more protective approach. Therefore, the thresholds established by the Navy for assessing impacts to marine mammals are likely set too high and as a consequence, the 129,112 annual estimated "takes" of marine mammals is likely to be significantly understated.	The methodologies adopted by the Navy are more likely to <u>over</u> -estimate impacts to marine mammals, for numerous reasons, three of which are described below:  1) Where a range of density estimates existed, or where densities were seasonal, the modeling considered only the greatest density. This assumption leads to more animals within a sonar's range, and therefore more takes.  2) The modeling estimates do not consider the positive impacts of the Navy's mitigation measures. In reality, many of the estimated takes (primarily PTS and TTS) would be eliminated due to power down procedures in place as a marine mammal approaches a sonar source.  3) All surface ship sonars are modeled as the more powerful SQS-53C, when in reality, 60% of all surface ship sonar hours proposed are significantly less powerful (225 dB compared to 235 dB of the SQS-53C).

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Point-05	We also question whether all mammals that are exposed to sonar above ambient noise levels are included in those counted as "takes," as the Navy stated at the meeting. It is our understanding that the threshold level for temporary and permanent injury, as well as behavioral effects, are set significantly higher than ambient levels.	The risk function model developed by the Navy and the National Marine Fisheries Service, and used in this EIS/OEIS to predict behavioral impacts to marine mammals, uses a "basement" value of 120 dB received level. Sonar levels received by marine mammals at or above this 120 dB level are considered in the model for their risk of causing a behavioral impact. Although 120 dB is higher than typical ambient noise levels, it is much less than typical sounds found in the ocean, such as:
		Bottlenose dolphin whistles – 125 to 173 dB (at 1 meter) Gray whale moans – 142 to 185 dB Snapping shrimp – 183 to 189 dB
Point-06	3) Fisheries impacts. Fisheries resources in California have declined precipitously in recent years due to a variety of causes. The presence of a viable fishing industry helps define the rural character of Mendocino County and contributes directly and indirectly to our local economy, including providing a significant cultural and epicurean backdrop for the local tourist industry. Anything that negatively impacts the fishing industry also negatively impacts our local tourist industry, economy and character. We are concerned that there seems to have been no meaningful effort to identify essential fisheries habitat for commercial fish species or to quantify in any meaningful way the potential impacts. The EIS acknowledges that there will be mortality and injury associated with training activities but without providing any meaningful analysis peremptorily concludes that there will be no significant impacts. We are afraid the Navy underestimates the number of marine mammals (and fish) that will be harassed, injured and killed because its acoustics impact analysis ignores scientific studies contrary to its interests and uses methodologies not supported by the scientific community. Thus, the thresholds it sets for permanent injury, temporary injury (hearing loss) and behavioral change (which we would argue are too high and thus completely underestimate the actual number of wildlife that will be impacted) are invalid as a matter of science.	As stated above, the acoustic modeling is more likely to overestimate than underestimate the number of marine mammals impacted.  The conclusions reached in the Draft EIS/OEIS are the results of thorough and complete analysis using the most relevant, most respected studies on the issues. Any claim that this analysis is invalid is completely baseless.
Point-07	4) Cumulative Impacts. The EIS lists projects that could have a potential cumulative impact, but does not provide the appropriate analysis. We are also concerned that statements were made at the meeting that indicated a lack of knowledge of or effort to discover, quantify or assess the degree to which other branches of the armed forces might be operating in the same areas and therefore creating further need for cumulative impacts analysis. Chapter 4 of the DEIS simply lists projects that could have potential cumulative impacts on the Northwest Range without actually analyzing what those impacts will be.	The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.
Point-08	5) Alternative analysis. The alternative analysis only considers three options: maintain the status quo, conduct training, or conduct more training. A meaningful alternatives analysis would have included a broader range of options.	Section 1.1 of the EIS identifies that the core of the EIS/OEIS is the development and analysis of different alternatives for achieving the Navy's objectives. Alternatives development is a complex process, particularly in the dynamic context of military training. The touchstone for this process is a set of criteria that respond to the naval readiness mandate as it is implemented in the NWTRC. The criteria for developing and analyzing alternatives to meet these objectives are set forth in

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		Section 2.2.1. This section in 2.2.1, combined with the purpose and need statement in Section 1.4 (along with background information that precedes this statement) adequately justifies the set of alternatives presented in the EIS.
Point-09	6) Mitigation Measures. The Navy fails to propose measures that would effectively limit the harmful impacts of sonar and other training activities on marine wildlife. The Navy has adopted more practical safeguards to limit the impacts of sonar for other training exercises and should do so here. Training exercises should be excluded from all coastal waters between the shoreline and the 100 meter depth contour. Consideration should also be given to avoiding lower continental shelf waters behind the 500 and 2,000 meter depth contours. Further, the Navy should rely on the technique called "simulated geography" in order to avoid undersea canyons; should identify and avoid essential fisheries habitat; should restrict sonar use at night when marine mammals are harder to detect; and should minimize the use of sonar from multiple sources at the same time. In addition to avoiding areas of high marine mammal populations, the Navy should also schedule training exercises to avoid conflicts with the gray whale migration season and routes.	The Navy and the National Marine Fisheries Service (NMFS) collaborated on the mitigation measures proposed in the Draft EIS/OEIS. The Navy believes these measure are very effective.  Other restrictions such as recommended in the comment were considered in the Draft EIS/OEIS in Section 5.2.1.5 – Alternative Mitigation Measures Considered but Eliminated. This section explains why these measures fail to provide any added protection to marine species.
Point-10	7) Target vessels. Concern has been expressed that the target vessels proposed to be sunk at sea may contain unacceptable levels of toxic contamination. The EIS should discuss the steps that will be taken to alleviate this concern.	The ships are NOT highly contaminated. Sinking ships at sea during naval exercises has been safely done for many years with no demonstrated damage to the environment. As described in Section 2.4.1.2 of the Draft EIS/OEIS, the target vessels are remediated to standards set by the Environmental Protection Agency.
Point-11	8) California Coastal Commission (CCC) Consistency Determination. We urge the Navy to seek a consistency determination from the CCC without further delay, and urge the Navy to voluntarily adopt comparable mitigations to those required by the CCC for the Southern California Training Range.	The Navy is in compliance with the Coastal Zone Management Act and has not delayed in completing a consistency determination.
Point-12	We wish to reiterate our concern regarding potential significant impacts to our already dwindling fisheries resources. Our fisheries are already subject to species specific harvest reductions and prohibitions as well as reduced or closed seasons. We can ill afford any further impacts to this irreplaceable resource. We note with some frustration that it is difficult to get a definitive answer regarding the level of training that may take place off the Northern California Coast, but we are assured that the level of activity is likely to be modest. However, there appears to be nothing to guarantee that should the training range be approved. Accordingly, we urge you to avoid any training activities in or near our waters that are likely to have a negative impact on fish or fisheries habitat.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne, but does not necessarily correspond to an increase in either aircraft flights or flight hours.  The Navy expects to conduct approximately the same level of activities as it has in these same areas for decades.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS.
Point-13	We are fully supportive of the need for the Navy to properly train to maintain a high state of proficiency and readiness to safeguard our nation and our naval personnel. However, we are confident that the training mission of the Navy can be accomplished in a way that is compliant with environmental principles and relevant environmental laws. We urge the Navy to adopt mitigations that will be protective of the marine environment and that will limit the potential adverse environmental impacts to marine mammals and fish	The Navy agrees that its training mission can and will be completed in a way that is compliant with environmental principles and relevant environmental laws.

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	species from the Navy's proposed status quo and the alternatives for the NWTRC. Further, we request Congressional hearings be held to review the	
	issues we have raised and to assure that optimum training levels are	
	maintained while environmental values are protected.	
	Thank you for your consideration of these comments.	
	[Full e-mail chain is included in Appendix H]	The proposed action includes potential increases in the number of certain
	From: angle ponder	individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft
	Sent: Tuesday, February 24, 2009 16:20	flights or flight hours, or at-sea time for the ships.
	To: Meyer, Jennifer S CIV CNRNW	<b>3</b> *** <b>3</b> ****, *******************************
	Subject: Re: Jet noise article	
	Jennifer	
	Thanks for the email. I thought you might be interested in this article:	
	See EIS 2.6.3 (Chapter 2, page 31) for the Range Activity Summary Table That's in the "documents" section of the range complex website. It is the source for the figures stated in that article, I think.	
	Angie	
	From: angie ponder	
	Sent: Friday, March 06, 2009 13:56	
Ponder	To: Melaas, Richard L CIV NAS WHIDBEY ISLAND WA	
	Subject: 2,800 MORE sorties somewhere?	
	Rich	
	I know that a sortie is different than an exercise. I got my information from Table 2-8:Impact of Range Enhancements on Annual Level of Activities, Chapter 2 page 2-32. where it says that there will be a 100% increase in the number of SORTIES for the EA-18G, P-3, and EP-3. Where do I find the information in the EIS that is specific to Whidbey Island not increasing its sorties? I have looked but can't find it.?	
	Thanks,	
	Angie	
	p.s. (I think I may have had the new Growler fly over my house on Feb.	
	12. Whatever it was, it was the loudest, most house-rattling fly- over	
	yet.)	
Popow-01	I live in Fort Bragg on the California north coast. I oppose the navy extending its training area along our coast. I urge you to prevent all government or private business interests from taking claim to any aspect of the ocean environment along the Northwest Pacific Coast.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Popow-02	The Fort Bragg/Mendocino area is a favorite tourist destination. People who visit our area come for the beautiful ocean views, the walks along the seaside bluffs, the fresh air and the quiet. We fear that the sight of naval vessels on	The Fort Bragg/Mendocino area is outside of the Northwest Training Range Complex and not part of this EIS/OEIS.

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	the ocean, the sight and sound of overhead aircraft would destroy the appeal our economy depends on.	
Popow-03	The nearly pristine ocean waters off the Northwest Coast of California, Oregon and Washington Northwest Pacific waters are perhaps one of the more environmentally intact ocean ecosystems that we have left in the World. No one should be granted the right to pollute ocean waters and inevitably harm creatures that dwell in coastal and pelagic waters. Organizations sometimes think they have a mandate, their over-riding rationale convince them that their actions are valid. Please don't let the health of the ocean be a tradeoff for the creation of new jobs or the testing of new weapons.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Popow-04	I am sure that you are aware that the giant kelp forests of the Northwest Pacific are home to myriad wonderful sea creatures. The grey whale makes its yearly travels between feeding and breeding grounds through the coastal waters of the Northwest Pacific. Besides pollution by chemical contaminants in the water and in whales' food sources from increased naval presence, the impacts of sonar testing are known to harm whale species. If for no other reason, don't add further negative pressure to the world's threatened fish populations by allowing the U.S. Navy to carry out this dreadful plan.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  The analysis of potential impacts to marine mammals and fish is found in the Draft EIS/OEIS in Sections 3.9 and 3.7 respectively.
Popow-05	We understand that the Navy proposes to comply with all the federal rules and regulations. But can they guarantee that they will have no impact whatsoever on marine life, noise levels, and visual effects?	No.
Popow-06	Those of us who live here love the ocean and the ocean life; we love the unspoiled landscapes, the quiet, and the exquisite views. We love to see the whales and the shore birds, to examine the tide pools, and to watch the sunset from the ocean bluffs.  We worry that the training will negatively affect our own lives as well as the economy, the local marine life, and the calm and peacefulness of our coastline.  Please do not conduct Naval training off of our coast.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Generally, the level of training proposed is similar to what the Navy has conducted in the past.
Port of Bandon-01	This port is appreciative of the Navy's interest in pursuing additional experimental training off Oregon's waters. However, in the last two years there has been a serious play on competing uses for these resources, whether it be wave buoy park sites, marine reserves, or the commercial fishing industry. Having no idea really of the Navy's true intent in performing sonar and detonating tests we are left to trust that all the proper research and vetting has been done. Many coastal agencies feel this has not happened. Notification should have appeared long before this short date in front of us to make comment.  In November, 2008 the Port of Bandon hosted a Naval team known as the Fleet Survey Team, Bottom Mappers who spent 5 weeks here reading, installing and tracking digital tide gauges and grid work on the ocean floor outside our bar. The Coast Guard stationed in Coos Bay called me and asked what was going on as they had no clue this activity was taking place under their watch. That event is really troublesome for us, in that no one,	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.  Since the inception of this project, the Navy has been completely transparent in every aspect of the development of this EIS/OEIS.

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	particularly the Coast Guard or the State of Oregon, had received information prior to the Navy setting up here. As a result, we approach this project guarded and with reservation and expect the Navy to be transparent in regards to this plan and the outcome. The oceans resources are an integral part to our coastal economies, which are already under fire from competing users, climate change and depleting fish stocks.	
Port of Coos Bay-01	Thank you for this opportunity to comment.  The Oregon International Port of Coos Bay (Port) is an Oregon Special District authorized under Oregon Revised Statute 777 and, as such, is classified as an Oregon municipality. The five-member Board of Commissioners is appointed by the Governor and confirmed by the Oregon Senate.  The Navy's public process for increasing the training area off Oregon has certainly been flying under the radar screen of coastal communities. The Port, like many other agencies and organizations, has only recently been made aware of the Navy's proposal.  While we are strong supporters of the Navy's mission, we believe it is prudent to extend the public comment period for an addition 60 days to allow time to complete adequate due diligence on the Navy proposal.  Please consider this comment letter as the Port of Coos Bay's official request to (I) extend the public comment period 60 days and (2) for the Navy to conduct additional public outreach visits to the coastal ports and communities who may be impacted under the proposal.  Thank you for any consideration you may give this request.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.
Port of Garibaldi-01	Oregon Coast Fisheries will suffer from the proposed plans to increase Navy Training operations off the Oregon coast.  The proposed increases will do damage to an all ready stressed group of commercial and sports fishermen. The Port of Garibaldi serves these fisherman. I want to add my voice to community concerns expressed about the proposed increase in training activities.  Please carefully consider the impact of this training as it relates to current proposals.	The analysis of economic impacts of the proposed action is found in Section 3.14 of the Draft EIS/OEIS.
Port of Newport Board of Comissioners (Port of Newport)-01	Thank you for the opportunity to participate in the public hearing that was held in Newport, Oregon January 30, 2009. The open house before the public hearing was very informative, and the personnel responding to questions on the posters that were available for public viewing were able to answer most questions asked of them.  The Port of Newport is located on the central Oregon coast. It is a deep draft port with a multitude of commercial fisheries and ocean research. The commercial fishing vessels and research vessels that homeport out of the Port of Newport travel the entire Oregon and Washington coast. The fisheries that our local economy depends on vary in size, in types of gear deployed, and seasonal dates applied to their fisheries. The most recent value placed on the Oregon Fisheries was in 2006; and overall, the industry contributed	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section

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	\$421 million in personal income to Oregon's economy. Listed below are the fisheries and their percentage of contribution.	3.14.2.
	<ul> <li>Dungeness Crab, 23.3%</li> <li>Pink Shrimp, 2.3 %</li> <li>Groundfish, 9.0 %</li> <li>Pacific Whiting, 8.9 %</li> <li>Sardines, 11.9 %</li> <li>Tuna, 3.4 %</li> <li>Halibut, 0.3 %</li> <li>Distant Water Fisheries, 38.5 %</li> <li>Salmon, 1.8 %</li> <li>Other open access fisheries, 0.6 %</li> <li>All fisheries except for those in distant water take place off the Oregon coast</li> </ul>	
	and gear is deployed and retrieved year around, with depths ranging from 5 fathoms to 800 fathoms.	
	There is also an ocean recreational fisheries component that is a large economic driver for the Oregon coast. The marine recreational component contributed \$31.9 million in 2005. Current figures will vary slightly due to loss of salmon fishing days. Any disruption of these fisheries, either commercial or recreational,' would have a direct economic and socioeconomic impact on the Port of Newport, neighboring communities, and other coastal ports of Oregon.	
Port of Newport -02	It is the Port of Newport's opinion, after attending the public hearing in Newport and reviewing the Northwest Training Range Complex EIS/OEIS, that the Port of Newport, State of Oregon and the marine resource users were not adequately represented. We also feel that the notification for the scoping and public hearing requirements of the EIS was inadequate. There was a minimal effort made to reach out to the marine resource dependant communities of the Oregon coast. (The public hearing in Newport, January 30, was announced in the local newspaper under the heading WINDS OF PRAISE BROADCASTING CHRISTIAN RADIO.)	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Port of Newport -03	The Port of Newport, representing commercial and recreational fishing interests, feels that the three large areas off the Oregon coast (W-570 / W-93A / W-93B) could have substantial impacts on our local and State economy if training operations are significantly increased off the coast of Oregon.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Port of Newport -04	The Port of Newport is requesting two things from the United States Navy  1. Extend the public comment deadline of February 11, 2009 by 30 days.  2. Conduct additional public outreach in a manner that gives adequate notice to the coastal communities that could be impacted. Our concerns could possibly be answered if given the chance to interact with the process.  The Port of Newport is hopeful that the United States Navy will respond to this request and act appropriately as outlined under the National Environmental Policy Act (NEPA) process.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.

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	The Port of Newport has great respect and appreciation to the men and women that serve in the United States Military. The Port of Newport also supports the needs of the United States Navy to achieve and sustain military readiness. With better communication in the form of well organized outreach programs to coastal communities, we believe we will have the ability to better understand the needs of the Navy and work together to solve coastal concerns. Thank you for considering this request.	
Port Orford Resource-01	The Port Orford Ocean Resource Team (POORT) offers the following in response to the public comment opportunity provided by the Navy about increasing the activity in the Northwest Training Range Complex.  The city of Port Orford, Oregon is a small fishing village of approximately 1200 people on the Southern Oregon Coast with a rich history. A Coast Guard station on the Port Orford Heads was operational from 1934 to 1970, There is also a nearby airport at Cape Blanco with an approximately one mile runway built during WWII which remains largely undeveloped. We presently do not have any Department of Defense facilities to help support our economy. The largest contributor to our economic base is commercial fishing, followed by tourism.  The Port of Port Orford estimates that over 10% of the population is involved in the fishing industry, with an economic contribution of \$5.3 million in 2004. The dock is situated on an open bay rather than river channel, necessitating the use of a hoist system to dry dock the vessels. Ours is the only port between Seattle and San Francisco with direct access to the ocean and used to accommodate large lumber of ships. Currently, the area underneath the hoist is affected by shoaling in response to a jetty system that does not work. This limits the number of days our fishermen can get out to the fishing grounds. Severe weather conditions off of Cape Blanco further restrict fishing opportunity and impact boat revenue.  The economic reliance on commercial fishing instilled the community with a strong need to create a sustainable fishery that takes the entire ecosystem into account. For example, Port Orford has gone through tough economic times resulting directly from a decline in the local fisheries. In the late nineties, the first blow came in the form of a crash in the groundfish stocks which led the state to use federal dollars for a retraining program for fishermen. The second (and subsequent third) disaster came with the 2006 and 2008 salmon season closures. The fishermen in Port Orf	The Navy recognizes and appreciates your many concerns.  The Navy's proposal is designed to accommodate the necessary training while minimizing impacts to marine life using the best available science, as discussed and analyzed in this EIS/OEIS.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

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	important watersheds on land out past the 12nm line in the ocean. This Stewardship Area boasts diverse habitats that both sustain our recreational and commercial interests and are a part of the most beautiful stretch of the wild, rocky southern coast. We strive to contribute to the overall health of the Stewardship Area while maintaining a working port and cultural traditions.	
	POORT has been endorsed by the City of Port Orford to advance the recognition of our Stewardship Area. From this partnership, the city has asked us to produce public comment on the Northwest Training Range Complex Environmental Impact Statement.	
	Whereas:	
	The health of the ocean is vital to the continued traditions in our city;	
	<ul> <li>A major part of the economic base of the community is reliant upon commercial fishing;</li> </ul>	
	We appreciate the Navy's environmental concerns and protective measures;	
	We recognize the importance of National Defense; and	
	We applaud efforts to keep the citizens of the United States safe;	
Port Orford	We are concerned about:	The analysis of potential impacts to essential fish habitat and marine
Resource-02	Destruction of essential habitat for fish and mammal populations;	mammal populations was conducted in the Draft EIS/OEIS, Sections 3.7 and 3.9 respectively.
Port Orford Resource-03	Disruption to marine life, such as changed physiology or behavior, due to increased training activity in local waters;	Because the vast majority of training takes place well out to sea and well north of Port Orford, there is little likelihood of negative effects along the Oregon coast.
Port Orford Resource-04	Closures of fishing grounds that would adversely impact the commercial fishing fleet;	Regarding the closure of fishing grounds and effects to recreational activities, there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference with their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Port Orford Resource-05	Effect of increased activity on the recreational opportunities, such as diving, charter fishing, and kayaking, in our area;	Because the vast majority of training takes place well out to sea and well north of Port Orford, there is little likelihood of negative effects along the Oregon coast.
Port Orford Resource-06	Potential use of live ordnance, explosives, and active sonar that will impact critical habitat; and	The use of live ordnance, explosives, and active sonar was considered during the analysis of potential impacts, with the conclusion that none of these activities will have a significant impact to critical habitat.
Port Orford Resource-07	Intrusion of such activities into our fragile nearshore environment;	All of the activities described in the proposed action take place typically at least 12 nm from shore. No training involving live explosives occurs within 3 nm of shore.
Port Orford Resource-08	We recommend:  • That our community is informed when exercises take place within or adjacent to our Stewardship Area by contact with POORT;	The Navy will continue to use Notices to Mariners and Notices to Airmen to inform the public of potential hazards and to help scheduling for all.

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Port Orford Resource-09	That a monitoring program to determine the effects on marine life from the increase in sound due to increased training activity be implemented;	The Navy has developed a Marine Species Monitoring Plan (MSMP) that provides recommendations for site-specific monitoring for MMPA and ESA listed species (primarily marine mammals) within the NWTRC, including during training exercises.
Port Orford Resource-10	That the Navy partner with community-based organizations like POORT to address environmental concerns;	The process to establish partner relationships with the Navy is outside the scope of this EIS. For more information, contact Navy Region Northwest (www.cnic.navy.mil/cnrnw/newsroom/index.htm)
Port Orford Resource-11	That more outreach to coastal communities be conducted and that POORT be contacted to coordinate local efforts in Port Orford; and	The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification efforts.
Port Orford Resource-12	That fair compensation be provided for communities that have no economic benefit due to the increase in training activity off of our coast to offset the potential decrease in fishing revenue;	The Navy does not expect its activities to have any negative economic effects on any community.
Port Orford Resource-13	We ask:  • For a partnership between the Navy and POORT to open lines of communication to the Port Orford community and to coordinate a monitoring program;	The process to establish partner relationships with the Navy is outside the scope of this EIS. For more information, contact Navy Region Northwest (www.cnic.navy.mil/cnrnw/newsroom/index.htm)
Port Orford Resource-14	• For economic benefit for our commercial fishing fleet by helping us solve the shoaling problem at our dock to mitigate potential and future loss of fishing grounds and allow for the possibility of Naval vessels to travel to our port;	The Navy does not expect its activities to have any negative effects on any Pacific fishing grounds.
Port Orford Watershed-01	Word has only reached us in the past few days of a proposal by which the U. S. Navy would assume control from the Oregon Air National Guard of the waters off the entire Oregon coast for training and other uses. There was only one public hearing (on Friday 1/30/09, we are told) in Depoe Bay, with advance notification printed only in one small Lincoln City newspaper; we are told that because of this, only about 40 people showed up, and since no one had yet seen the 1,000 page Environmental Impact Statement, it was difficult to comment intelligently about it.  Now, we are told that the period for public comment has been "extended" to February 18, 2009. Clearly, the public has not had adequate time to review and understand what is being proposed. We are told that among the uses contained in the "preferred alternative" presented are mine fields, artillery shelling practice, submarine exercises including munitions, EA-18G and P-8 aircraft, air and sea surface targets, a portable undersea tracking range for anti-submarine training, and use of mid-level and high frequency active sonar, known to cause deaths of marine mammals, especially whales.  Obviously, this is a very big deal, and the seeming rush to a decision without even a nod to adequately informing the public is almost guaranteed to result	The Navy will not assume control of the Oregon Air National Guard for training.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification

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	in fervent opposition. What could you have been thinking?	efforts.
	The Port Orford Watershed Council wishes to go on record in demand of full, complete and transparent information of the general public, with numerous and well-publicized hearings held at numerous locations along the coast and inland to be convenient to the many people who will potentially be affected. We are not yet ready to oppose the plan (indeed, it seems the Navy has gone out of its way to deprive us of the information and time we need to even evaluate it), and we are not approaching this from a "not in my backyard" perspective. We simply must have a full and complete public discussion of these plans before any decision is made.	
	On behalf of the residents of our region, I am requesting the Navy to hold an additional public meeting during the comment extension period for this Draft EIS/OEIS.  This request is made due to adverse weather circumstances that prevented	Unfortunately, the Navy could not assemble its team of representatives and coordinate the logistics effort within the project's timeframe and budget.  All comments received, whether at a public hearing, in writing, or via the
Port Townsend-	attendance by individuals from our region to attend the public meeting on Whidbey Island, Oak Harbor on January 27. The weather precluded the ferry service from running that evening and many who wanted to attend had no other means to make the crossing.	project website, are all given the same consideration.
Office of the Mayor- Sandoval	We know that they have had other ways to comment; however it is important that a public "face" be available to allow people an opportunity to be heard on a more personal and connected level. To help in this effort we (the City) are willing to arrange space (at no cost) to accommodate a public meeting.	
	Please contact our City Manager, David Timmons to make any necessary arrangements for you. I trust that our request can be granted before the comment period closes and look forward to a positive response.	
	Thank you in advance for the efforts to reach out and build a strong community partnership with a very challenging mission.	
Port Townsend Peace Movement	Enclosed find 70 signatures regarding the expansion of the NW Training Range Complex. As the text of the enclosed signature pages states "we the undersigned" support the "no action alternative." Thank you for including our comments. Please keep us posted as the EIS process unfolds. Our addresses are included.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
(Milholland)-01	We, the undersigned members of the Port Townsend Peace Movement, support the "no action alternative" (maintaining existing training levels) in regards to the expansions planned by the Navy for its Northwest Training Range Complex.	
Dort Towns and	The readiness exercises involve the Northwest fleet including two aircraft carriers, 10 warships, 14 submarines, 90 support vessels and 119 aircraft - based at five installations in Washington state. Navy practice includes using	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.  The U.S. Navy has conducted mid-frequency and high-frequency active
Port Townsend- Milholland-02	high-powered and explosive sonars, missiles and munitions.  According to the Oregonian article Navy plan to increase warfare training off Oregon coast draws objections by Scott Learn & Lori Tobias "The biggest environmental concern is the Navy's use of midfrequency active sonar, which	sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the
	would increase under the plan. Sonar use damages whales and other marine	fact that there is little documented scientific information demonstrating

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	mammals that use sound to communicate and navigate. The training area includes waters used by nine marine mammal species listed as threatened or endangered including seven whales. Of particular concern are Puget Sound's southern resident killer whales, whose population has dwindled to about 70.	broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Port Townsend- Milholland-03	In its review, the Navy said sonar exposure contributed to five "mass stranding events" worldwide since 1996, with whales showing up dead in numbers on the beach. The review says the increased training would boost potentially harmful mammal sonar exposures from about 110,000 a year to nearly 130,000. The Navy has rejected the idea of seasonal shutdowns or avoiding key habitat areas."	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Port Townsend- Milholland-04	As important as training is to the Navy, we support the No Action Alternative due to the proposed testing of new weapon systems and the lack of information available to assess the impact on numerous endangered and declining marine species.  (Signatures and news articles are attached with key points underlined or commented on.)	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Porter-01	I have reviewed the Northwest Training Range Complex EIS and feel that Biological Assessments/information are completely inadequate in addressing NMPA and Endangered Species Act guidelines.	The Draft EIS/OEIS fully meets the requirements of NEPA in every respect. The Navy has consulted with the National Marine Fisheries Service (NMFS) in accordance with the MMPA, and has consulted with the U.S. Fish and Wildlife Service and the NMFS on ESA-listed species.
Porter-02	Current training levels at Crescent Harbor, Whidbey Island and Naval Magazine Indian Island, Port Hadlock are in question as to the 'actual takes' and estimated 'take' by Navy testing and training of inert explosives. NOAA has documented the testing at Crescent Harbor which indicates that the effects of these 'explosions' are far more damaging then the Navy is indicating in the NWTRC EIS.	There are only 4 underwater detonations performed a year in the NWTRC. The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of
	The level of testing proposed by the EIS will cause detrimental impacts on	Personnel Qualification Standards Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  The proposed actions calls for no increases in training in Port Townsend
Porter-03	the Orca population in the Puget Sound. Increased Navy testing in Port Townsend Bay is not only an environmental concern but a safety hazard due to the proximity to Port Townsend proper. The community of Port Hadlock and Kala Point would be put at risk with expanded training and testing, while they are less then a mile from Crane Point (testing area).	Bay. As shown in Table 2.10 of the Draft EIS/OEIS, underwater detonations will decrease from 4 per year to a maximum of 1 per year. There are no other training activities in Port Townsend Bay.
		The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Porter-04	The No Action Alternative proposed does not address the existing problems with current training and testing levels. The NWTRC is too vast in size with unnecessary encroachments on coastal waterways with communities	The No Action Alternative describes the current training levels in the NWTRC. The existing environment of the NWTRC is described in each

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	dependent on tourism and local fishing industries. The Navy needs to look at new environmentally friendly methods of training our military personal.	relevant resource section of Chapter 3 (Sections 3.1 through 3.16).
Quileute-01	This is a brief review and a request for a meeting with our policy and technical personnel, to discuss. Please see below.	The Navy has initiated communication with Mel Moon and Katie Kruger, representing the Quileute Tribe.
Quileute-02	First let us say that Quileute is a member of the Advisory Council of Olympic Coast National Marine Sanctuary and we participated in their review. We adopt their comments as our own by reference here and agree in full with the statements therein. It is clear this has been a huge labor on the part of the Navy but we are concerned about a number of matters in addition to Advisory Council remarks. We find that certain statements are lacking in detail and do not explain situations to our satisfaction.	The paragraph referenced in the Executive Summary discusses the degradation of expended materials as, "their strong resistance to degradation" and, "would gradually degrade." The Navy does not consider these two statements to be contradictory, and no change has been made to the text.
	For example, in ES 1.5.3.1, par. 3, nonreactive materials are said to provide "strong resistance" to degradation but expended materials "eventually degrade". This is somewhat contradictory but the statements stand side by side. That needs clarity.	
Quileute-03	In the last line of the same page, we must accept your word that gases form harmless substances in seawater but there are no citations to support the remark.	The Executive Summary and was meant to provide only an overview of the impacts, not a repeat of the thorough analysis included in the resource analysis section. The data supporting the Executive Summary conclusion cited can be found in Section 3.3 within the main body of the EIS/OEIS.
Quileute-04	At ES 1.5.7, fish are killed by shock waves and we take your word this is insignificant but there are no data to show ratios of impacted fish vs. non-impacted, or areas affected vs not affected. The same is true for invertebrates, in 1.5.6.2.	As described above, the full analyses that support these conclusions are found in Section 3.6 – Marine Plants and Invertebrates, and Section 3.7 – Fish.
	We are dismayed to see a discussion of use of depleted uranium at page 3.3.9-we were told by Navy staff that this use was either discontinued or at least the types of missile coverings were of a different nature so that effect was de minimus. Now we see it is used, regularly, but only one reference from 1974 is relied on to reassure us of minimal bioaccumulation. Some British studies from about 5 years ago show no evidence of the uranium after use, so we are led to believe what? It is taken up? It is disseminated in currents? You do not offer a reason. It is critical for our fisheries, to know this	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Quileute-05	matter.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural

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		uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Quileute-06	Under Cultural Resources, 3.12.1.1.2, you include tribal fishing rights and deserve kudos for this as so few entities recognize anything beyond artifacts as of tribal cultural significance. Under Public Safety, 3.16.1.1, we hope to be able to assure our fishing craft are not in the path of testing activity and need to discuss that with you. We use at a minimum test areas W-237 A, B, C, D, F, and H regularly.  The Quileute Tribe values the service of the US Navy to our nation, and appreciates so much Admiral Symonds' efforts to reach out to tribes. In that vein, can we have a conversation in person, not perhaps at the government-to-government level but more informally, technical and policy to technical and policy, to discuss matters mentioned here? That would be appreciated. To set up such meeting, please contact me at 360/3742265 or katie.krueger@guileutenation.org.	Before the Navy conducts any hazardous activity, such as live weapons firings, the ship or aircraft conducting the activity finds a clear area in which the activity can be completed. The presence of any vessel or craft will require the ship or aircraft to cease the activity and reposition to find a clear area. The Navy is proud of its safety record in this regard.
Quinault-01	The following will serve as comments from the Quinault Indian Nation on the Draft Environmental Impact Statement (DEIS) for the proposed expansion of activities within the Northwest Training Range Complex (NWTRC). We appreciate the work the Navy has done on the DEIS and the opportunity to comment on it.  The Quinault Indian Nation (QIN) is one of four coastal treaty tribes with management rights to the ocean areas adjacent to our reservations on the Washington state coast. The Quinault Nation has a federally adjudicated Usual and Accustomed harvest area (U&A) that encompasses the majority of Navy Operating Area W-237-A South. Quinault currently operates 28 tribally owned fishing vessels out of Westport, WA. These vessels fish for crab, halibut, blackcod (sablefish), lingcod, rockfish and salmon in the W-237-A Operating Area. Quinault also has plans to expand their fisheries within this area in the future and reserves the right to do so.	The Navy is fully aware of the importance of the U&A fishing rights of the QIN (please see discussion on pp. 3.12-3 to 3.12-9 of the Draft EIS/OEIS). The Navy will continue to honor the U&A Treaty Right as described in the comment.  As stated in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Therefore, the QIN should expect no change in the level of interaction with U.S. Navy ships and aircraft.

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	The QIN has recently made comment on the proposed expansion of the Naval Undersea Testing Range to use all of W-237-A instead of a much smaller area. Those comments are available through the NUWC Division at Keyport, WA. Our concerns with that range expansion and the proposed expansion of activities in the NWTRC are very much the same. Quinault has ceremonial, subsistence and commercial fisheries that are place-based. That is, there is no place else for us to fish but within that area. We cannot move our fishing effort elsewhere and therefore insist that any activities conducted by the Navy do not interfere with that Treaty Right, affirmed by the United States Government.	
Quinault-02	To avoid any conflicts with our fisheries and to foster continued cooperation we request that the Navy formally declare protocols and points of contact with Quinault that would keep the QIN informed in a timely manner of any activities that may, potentially, affect our fisheries, either directly or indirectly. A meeting should be held between our governments to formalize this process and avoid any potential conflicts.  If the Navy fulfills this request and obligation the Quinault Nation would have no objections to the Preferred Alternative within the DEIS (Alternative 2), which expands your operations within the NWTRC.	The Navy has established communications with Joe Schumacker, representing the Quinault Indian Nation, to discuss these issues.
	The following are General Comments regarding activities that the QIN may have issue with within the U&A and thus, W-237-A South.	
Quinault-03	General Comments  Interference with our fisheries: can occur by naval vessels transiting or conducting exercises in the area; by scheduling activities during the seasons and times and within the areas of our fisheries; by interference with navigation and communication systems on our fishing vessels (Electronic Combat and communications by naval vessels) and by deployments of the Portable Undersea Tracking Range (PUTR) and submerged Minefields. We request that activities such as these not occur within W-237-A, or at minimum, be scheduled and placed so as not to impact our fisheries or threaten the safety of our vessels and fishers.  Impacts to our fisheries resources: can occur from weapons fire, explosive ordnance, acoustic effects on fish, toxic contaminants resulting from exercises, gear, wire or cable entanglements. We have reviewed your findings of minimal effects for most of these concerns but note that limiting proximity to the fisheries resources of the QIN is essential for assuring that minimal impacts will occur.	The analysis of impacts to fishing associated with Navy activities can be found in Section 3.14 of the Draft EIS/OEIS. Safety analysis is in Section 3.16. Impacts to fisheries can be found in Section 3.7.
Quinault-04	Other potential impacts of concern: would include flight noise that could interfere with the peace of our coastal communities;	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Quinault-05	degrading toxics in the ocean that may cause cumulative effects or possible bioaccumulation over time;	A complete discussion of the potential impacts of hazardous materials is included in Section 3.3 of the Draft EIS/OEIS.
Quinault-06	that promised retrievals of deployed equipment by the Navy may not occur	In the course of Navy training as part of the proposed action, certain

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	for various reasons;	military expended materials will be left behind in the ocean. These include items as small as 9mm bullets to ships sunk as part of a sinking exercise. A full discussion of the potential impact of these items is found in each of the resource areas where these materials could have an impact (3.3, 3.4, and 3.6 through 3.10).
Quinault-07	and that, even though the Navy has studied this extensively, that marine mammal strandings may occur as a result of high-powered sonar activity.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		Also, please see the full analysis of marine mammal strandings in Appendix E of the Draft EIS/OEIS – Cetacean Stranding Report. The report discusses the various stranding situations across the world-there are many reasons for whale strandings.
	Specific Comments to the DEIS:	This change has been incorporated into the Final EIS/OEIS.
Quinault-08	(Addressing Section 3.12.1.1.2 Tribal Fishing Rights Page 3.12-5 Fifth bullet) reads" Quinault participate in a variety of groundfish fisheries"  This passage should include mention that tribes reserve right to fish for groundfish with any gear including traps and trawl gear. Also Quinault fishes off the Central Washington coast so not just 'off the north coast of the Olympic Peninsula.'	
Quinault-09	(Same page, next bullet) Though the header states that "Native Americans use these areas for both commercial and subsistence fishing, as follows." it is not clear in the bullet detailing near-shore fisheries that all of these species may be harvested commercially as well as for subsistence and ceremonial purposes. (referring to page 3.12-5)	This change has been incorporated into the Final EIS/OEIS.
Quinault-10	(Same pageshould be included) The Quinault fishing fleet is based in Westport, Washington and fishes the open ocean area from there north to Destruction Island. This fleet and a smaller river fleet also fish commercially within Grays Harbor.(referring to page 3.12-5)	A new bullet with this information has been added and has been incorporated into the Final EIS/OEIS.
Quinault-11	(Section 3.12.1.1.3 'Culturally Significant Areas') The coast of the Quinault Reservation north of Pt. Grenville to the Queets River is considered Culturally Significant by the Quinault people. This beach area is closed to the public unless a pass is issued by the Tribal Council.	A new bullet with this information has been added and has been incorporated into the Final EIS/OEIS.
Quinault-12	(page 3.12-7-'Pacific Coast Tribes and tribes with Treaty Fishing Rights')Besides being members of the Olympic Coast National Marine Sanctuary Advisory Council, the four Coastal Tribes, with the State of Washington have formed an Intergovernmental Policy Council (IPC) to better coordinate the needs and rights of the co-managers of the resources within	This change has been incorporated into the Final EIS/OEIS.

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	the OCNMS with Sanctuary staff and the National Marine Sanctuary Program.	
Ramirez-01	I was so upset to see this article about the Navy's ocean testing program, as was my 8 yr. old granddaughter who asked me "Gram what's new in the paper today?" I explained the article to her. She threw her arms up and asked "What can we do to save the whales and dolphins?" We as native people gather some of our food from the ocean you propose to destroy. I want my granddaughter and her 2 year old brother to continue to enjoy our cultural ways. This testing program will end the cycle of our fish and the migration of the whales and dolphins in the spring. Please consider this scared site. My granddaughter ask you "to please keep our ocean animals safe."	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities and underwater detonations for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, limited detonations per year, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training or underwater detonation exercises as proposed in the Draft EIS/OEIS.
Ray-01	We are against Mendocino County ocean waters being used as weapons testing. There is enough contamination in this world. How much is too much.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Raybee-01	We have not all signed up for this experiment. We should not be exposed to dangerous chemicals, nor should the wild sea creatures. Instead of spending all that time and money developing weapons-let's spend it on peacemaking efforts. Spend it developing solar wind energy, which would make wars unnecessary.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Redelsperger-01	I have just heard for the first time, that this evening, in Newport, Oregon, will be the only opportunity for the public to make their opinions known regarding the Navy's use of sonar off the coast of Oregon. I have also heard that the Navy has intentionally only just announced the meeting publicly to avoid large numbers of attendees.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. Also, public review of the document was not limited at any time during the comment period because comments could be submitted by mail at any time.
Redelsperger-02	The fact that I live in an inland community will indeed, certainly preclude me and many others from reaching the coast in time to attend this meeting. I find this decision to be at best, sneaky and at worst somewhat underhanded. Over and again scientific facts have come to light making clear that the use of this sonar IS harmful to aquatic mammals. The fact that most of us will be unable to have our voices heard by Navy representatives in Newport on this subject this evening is quite unfortunate and unfair.	The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification efforts.
Redelsperger-03	Oregon has twice yearly migrations of whales and many coastal communities depend, in part, on the revenues of whale-watching tourism to survive. The reason these communities would be affected is because THESE TESTS KILL WHALES.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy

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	But, putting the financial burdens it would have on the communities aside, BECAUSE of the dangers to the ocean wildlife caused by these sonar tests, I MUST STRONGLY OBJECT TO ITS' USE OFF THE OREGON COAST. Please, PLEASE, I beg you to reconsider the testing of this sonar off our pristine, beautiful, natural Oregon coastline. There must be other less harmful ways and less vulnerable areas in which these tests can be more safely conducted.  I realize that the Navy, despite the proven dangers to wildlife, lawsuits and the outcries of scientists and concerned citizens around the world, will do whatever they want anyway. But, just know that our planet belongs to everyone, man and beast, and is the only one we have. If it or its' inhabitants are harmed or destroyed we get no second chance. This is our one time to get it right. All legitimate concerns must be seriously weighed, not just given lip service. It is not just about the whales. It is not just about the needs of the U.S. Navy (in which my father proudly served. It is about how we, with our ability to reason, manage and protect, on a much larger scale, this Earth, this Gift, OUR WORLD. Please respect this gift.	personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Richards-01	I would like this letter to be entered into the record as part of the written comments generated by the Navy's proposal to expand ocean and land-based operations by conducting underwater demolitions, electronic communications and testing explosives and surveillance systems.  The undersea world is such a fragile place, can't we just leave it alone? It's bad enough that barges loaded with garbage are taken out to sea and that we seem to be continuously layering it with oil and gunk. I saw a short film the other day that featured dolphins creating their own toys. They blow bubbles through the hole on their back side. They create new bubbles by nudging the first bubble. They know at what depth to keep the bubbles from bursting, and they use them like giant hoops which they jump through. Why would you even consider destroying that serenity?  I was recently privileged to watch the whales' migration from the incredibly beautiful Mendocino Headlands and can't imagine even for a moment interfering with this yearly miracle in their life cycle.  Please do not proceed with this awful proposal.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Riley-01	I hold an MS-Environmental Studies from the University of Wisconsin-Madison. I and my family and friends fish and recreate within the NW Training Range Complex.  I have reviewed the EIS/OEIS of the Range Complex for Naval training and testing of planes, ships, submarines, weapons, men, and the potential for environmental impacts.  I evaluated the:  *No Action Alternative  *Alternative 1  *Alternative 2 I have concluded that Alternative 2 is the only logical conclusion that will	Thank you for your comment.

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	afford realistic testing of future planes, ships, submarines, weapons, and men, while at the same time minimizing environmental impacts.	
Roden-01	I was horrified to learn that the U.S. Department of Defense and the U.S. Navy want to expand their Northwest Training Range Complex and request permission from the U.S. Department of Commerce (NOAA) to kill thirty two species of marine animals over five years in the their Pacific Ocean Warfare testing program.  I adamantly oppose the expansion of the areas of operation, which will include large areas of the Pacific Ocean from California to the State of Washington and areas along the border between the United States and Canada.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Roden-02	My understanding is that the testing program will use mid- and high frequency active sonar sources and explosive detonations," both of which are lethal to marine life. The U.S. Navy's move to test more weapons of mass destruction in the Pacific Ocean is reminiscent of the outmoded thinking that tested atom bombs in the Bikini Atoll after World War II.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Roden-03	I also understand that, once implemented, there is no date specified in E.I.S. for this Navy Warfare Testing Program to end. This is unthinkable.  That said, I strongly urge that the Navy's request be denied.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Rodman-01	Of the proposals that the Navy laid down during its hearing at the Hatfield Marine Science Center in Newport January 30, The No Action Alternative is the only one worthy of recommending. Unless there is a Cease and Desist alternative.  It is ludicrous to state that under Alternatives 1 and 2 that undersea detonations will decrease dramatically, as if this is the more marine-friendly way to train. Obviously the cumulative impact of the additional training under Alternatives 1 and 2 will have a much more adverse impact on aquatic life.	This comment has been duly noted.
Rodman-02	It is almost impossible to believe that training exercises that include	Historically, as well as projected for the future, training within 12 nm

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	underwater mine fields, exploded and unexploded bombs, gunnery rounds etc and heavy vessels would not have adverse impacts on the area it is occurring. Depleted uranium anyone? One of your officers told me that there is no assurance the war games will stay in the suggested areas, that the actual location of the training areas have to remain classified. What can we go on to rest easy that your work will not drift into more sensitive waters than your proposed deep sea maneuvers? What recourse does a coastal community have from the adverse effects of your training? The best defense is to do no offense to our greatest resource.	seldom if ever occurs off the coast of Oregon and Northern California.  Also, no training involving live explosives take place within 3 nm of shore.
Rohloff-01	We are against using the Mendocino, CA waters for naval exercises!	Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. However, there is no Navy training off of Mendocino County.
Roiz-01	Please do not proceed with this expansion. The Pacific Ocean needs more protection especially during this time of global warming and threatened species. Development of an underwater training minefield, deployment of thousands of sonar-emitting sonobuoys, testing of new aircraft and missiles will result in tremendous negative environmental impacts.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Roiz-02	The Humboldt Bay area is very active seismically and should be protected from destabilizing impacts. What guarantees can be given regarding seismic safeguards?	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." (http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&nextRow=next)
Roiz-03	Fisheries are in serious decline and salmon species are threatened along Northern California. How will all this new activity and weapons training affect this critical situation?	The analysis of impacts to fishing associated with Navy activities can be found in Section 3.14 of the Draft EIS/OEIS. The analysis of impacts to fish species is in Section 3.7. In both cases there would be no negative impacts.
Roiz-04	What about harmful air and environmental impacts in general on mammals and humans. How will such effects be monitored and public notification be disseminated?  Understandably the Navy wants to maintain its readiness and mission to protect our country, but expanding and increasing the levels of activity in sensitive ocean environments Is unsafe and unwise and seems contrary to their goal.	A complete analysis of air quality impacts can be found in the Draft EIS/OEIS in Section 3.2. All other environmental effects were analyzed throughout Chapter 3.
Rosenkrantz-01	I live in Fort Bragg California, which is 150 miles north of San Francisco, between Pt. Arena and Eureka, Ca.  I am writing to communicate how opposed I am, and many of my neighbors are, to the Navy plan to take 32 species of marine-mammals in the 5 year warfare testing plan in the Pacific Ocean. This is estimate to kill 2.3 million mammals a year. (5 x2.3 mil=)  The ocean's resources are not endless! Thank you for your consideration.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Sadon-01	I have lived on a Pacific Ocean facing, western slope of the coastal ridges	The U.S. Navy has conducted training activities, including the use of mid-

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	near the Mendocino Humboldt County line for over 30 years. The oceans horizon is the view from my property and many windows of my house, as it is of many rural neighbors. From the air one does not see parking lots and shopping centers here, but rural communities flanked by Wilderness State Parks and National Forest /Wilderness areas. This area contains the strenuous and precipitous coastal trail.  We live here because we need clean water, clean air and the peace and quiet of whispering trees and the calming sounds of birds and frogs.  About 20 years ago at a local beach, I went out on a point of rocks to check out the view. To my shock I found a fighter jet at eye level, flying right over	frequency and high-frequency active sonar for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
	the water less than a hundred feet from me, silent as death, as the sound was far behind. At least then I was young enough to not have a heart attacknot so know.  Maybe you don't remember when our community suffered sonic booms that	
	shattered our hearing? Mercifully you ended them after we complained.	
	Do you remember the military aircraft that went down in the deepest trenches off Cape Mendocino several years ago? It took years to find it and more years to bring up the remains. I would think such a deep water training area not such a great idea.	
	I do not want to see <u>any</u> increase in naval training in the NWTR complex. Two communities of northern Mendocino Co. have whale festivals every year celebrating the whale migration through here. These festivals are an important economic time for these small towns. Do not risk the health and migration routes of these important mammals with sonar and depth charges.	
	There are hardly any fish left on the north coast. The numbers of brown pelicans and cormorants has dropped very low. They should not be frightened off their nesting territory by aircraft.	
	There is precious little costal wilderness left. Even a little damage can spell the end of many species now. DO NOT increase your training here!	
	You could be more accessible to receiving comments if	The correct web address is:
Sadon-02	<ol> <li>Your website could be searched- I entered NWTRangeComplex.com and found nothing.</li> <li>If your postal address was shorter and more concise-yours is so long no one would repeat it on the radio-how about initials- NFECNW and a P.O. box instead of a long street (odd name) and suite?</li> </ol>	www.NWTRangeComplexEIS.com  Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. In each of the papers in which the placed an add, the full website and postal address was included.
	Most people will not read long names and addresses-much less write them down. Your comment information was not in either of the 2 local newspapers. Please try harder next time to truly engage the public. But I do thank you for the comment extension time of Feb. 18 <sup>th</sup> /	
Sadon-03	I object to any increased activity in the Northwest Training Range Complex. I feel that the EIS has insufficient data and information on the expected damage and loss to sea mammals, birds, and fish if activities increase. To try to gather that information later, leaves making an important decision based	The authors of the EIS/OEIS drew heavily from over 1,000 independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.

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	on guess work.	
Sadon-04	I feel that surface-ship sonar is too damaging to sea life and also that bomb detonations are too damaging to fish. With all of the ocean's inhabitants numbers down ( & salmon off California close to zero), it is unjust to "take" or kill or maim more sea creatures.  Please accept the no action alternative.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Saleeby-01	I would like to state that I am opposed to increased training flights at the NAS Whidbey in Washington. As a resident of the Skyline area in Anacortes I have noticed an increase in activity already and do not want any further flights over populated areas.  My quality of life has significantly changed with this increased activity. It is no longer just one or two nights a week, but far more frequently and LOUDER. I have called to complain but nothing has changed. One evening I even had to increase the volume on my TV to "45" in order to hear it - normally it is set somewhere around 16 -18. Jets are going over head as I'm sitting here typing this email and it's 2:30 in the afternoon! It has been day and night lately.  The benefits of having a Navy base in this area no longer outweigh the draw backs. Perhaps you should just close the base and save some money - consolidate your efforts and fly out of another base somewhere else. I've had enough of the "Sound of Freedom".	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Saleeby-02	P.S By the way your web site did not accept electronic comments the day I tried (January 27,2009) so I get the feeling that you really don't want to hear comments from the citizens. I'm probably just wasting my time again!	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
San Juan-01	In review of the Northwest Training Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement (NWTRC EIS/OEIS), the San Juan County Council would like to go on record with comments. We understand the U.S. Navy's mission and appreciate the need for training and military readiness. Although important, we have considerable concerns regarding doubling the number of sorties as noted in the EIS/OEIS Alternative 1 and 2.  We ask that you continue to keep the flights at a higher altitude so as to minimize the impact over our local residents. Furthermore, we encourage NAS Whidbey to maintain its current policy to direct flights over water and avoid flying over our islands as much as possible.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades. This point has been clarified in the Final EIS/OEIS.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
San Juan-02	In addition to the impacts on our residents, we are also very concerned about the stress on our biological and natural resources. The San Juan County	The conclusions in the Draft EIS/OEIS are consistent across all resource areas; that the proposed activities in the NWTRC will have no significant

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	Council has made it a priority to protect our natural resources.	impact to any biological or natural resources.
	We look forward to having you or a representative visit San Juan County to address our concerns and explain your future plans and policy. Please accept our invitation for further dialogue on the impacts to our community.	
San Juan-03	The San Juan County Council would like to issue an additional, very last minute, comment on the Navy's Draft Environmental Impact Statement (DEIS).  During the night of April 7-8, high intensity sonar signals were detected by local hydrophones. These sounds were of an intensity known to be disturbing to wildlife, especially the endangered resident orca whales. We do not believe that loud pings or explosions should be permitted in the critical habitat of the southern resident orca.  While this issue may not be germane to the specifics covered in the DEIS, it does relate to whether we can continue to depend on the U.S. Navy being a good neighbor and partner in protecting our environment.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The use of sonar described in the comment involved the use of sonar for safety of navigation, not for training purposes.
Sayewitz-01	I realize that you think the need for military exercises and training outweighs all other considerations. But consider this: all your military exercises are just that – mere exercises. We have no enemies, at this time, that can realistically compete against us on the seas. Any maneuvers we conduct now will most likely not be applicable when the time comes.  We are now in an age of extinction to rival the great extinctions of the past. Sea mammals are just beginning to recover from over hunting. Now we propose to put the sonic equivalent of a firing range in their front yard. Posterity will not look kindly upon us if we hasten their demise for the sake of unnecessary war games.  Let's find another way that does not include polluting the ocean with debilitating noise.	This comment has been duly noted.
Schumann-01	I am deeply concerned about the Navy increasing its training exercises in the Puget Sound area. First off, the current report is vague and incomplete, especially in regards to the portion covering the Olympic Coast National Marine Sanctuary. There is no specific information on training activities in this area, according to the sanctuary's advisory council.	Special training restrictions within the Olympic Coast National Marine Sanctuary (OCNMS) are regulated by the National Marine Sanctuaries Act, discussed in Chapter 6 of the Draft EIS/OEIS.
Schumann-02	My greatest concern is for the health of the southern-resident orca population. This orca group is dwindling in number and any increase in active radar [sonar?] activity would be very detrimental to this tenuous group. Active sonar is known to confuse marine mammals.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca, which contains the southern resident killer whale's critical habitat.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training

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		exercises as proposed in the Draft EIS/OEIS.
	The measures the Navy presently uses to mitigate this (i.e., using observers onboard to watch for nearby marine mammals) are insufficient.	Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.
Schumann-03		Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
		While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Scriven-01	I am a resident of inland Mendocino County and have experienced recreational activities from Gualala to Crescent City as a diver, angler, kayaker, tide-pooler and bird watcher. I do not support Alternative 1 or Alternative 2 of the NWTRC EIS/OEIS. I think expansion of this military program is a bad decision during this time of fiscal challenge for our nation and that our tax dollars would be better spent helping the families and small businesses throughout the United States. I do support U.S. Congressman Mike Thompson.	This comment has been duly noted. It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
	I would highly recommend that in the future you reach out to the sea grant program for help in outreach about hearings, activities, etc. If you ever run into issues with user conflicts, identifying locations for testing, designing outreach/engagement programs, or other such issues relating to the coastal community, we could really be helpful in helping you design processes to collaborate with communities. We have done this with many types of folks including the towboat industry, the telecommunication industry, wave and wind energy developers, and the United States Coast Guard.	Thank you for the information.
Sea Grant Extension (Hildenbrand)-01	While, there is often a federal process outlined to inform and provide opportunities for the public to have input on ocean activities that process often falls short when it comes to actually solving issues relating to conflicting uses. If the preferred alternative is selected, I would really urge you to connect with Sea Grant to talk about how to plan a process that would include existing ocean users in identifying a site for off-limits navy testing. This type of approach could most certainly result in not only a better process, but a better product for both the Navy and for the coastal communities.	
	Below is a list of contacts for Sea Grant programs on the west coast.	
	Alaska Sea Grant: http://seagrant.uaf.edul Contact person: Paula Cullenberg, anpjc@uaa.alaska.edu	
	Washington Sea Grant: http://www.wsg.washington.edul Contact person: Steve Harbell,	

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	sbarbell@u.washington.edu Oregon Sea Grant: http://seagrant.oregonstate.edul Contact person: Kaety Hildenbrand, Kaety.Hildenbrand@oregonstate.edu California Sea Grant: http://www-csgc.ucsd.edul Contact person: Carrie Pomeroy cmpomeroy@ucdavis.edu	
Seymour-01	Just saw in the Oregonian about training program. I am concern over sonar uses and number of missiles fired, the size or number of gun shells two. I serve in Navy from 1956-1959 on air carrier. I was in a jet squadron of VF 141 flying F-4-Ds out of Miramar NAS San Diego, Calif. Please send me draft report, asap. I hope they have more hearing on this soon. One hearing is hardly enough!	The Draft EIS/OEIS was available as several libraries along coastal Oregon, and has been available fro download from the project website since December 29, 2008.  The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification efforts.
Shane-01	I am writing an URGENT request to put a halt to the proposed expansion of the NW Range Complex Training Program for NAS Whidbey.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Shane-02	I understand that public notification of this project has been extremely inadequate, as well as an ample investigation of an EIS, (environmental impact statement).	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Shane-03	Live ammunition, marine sonar and use of chemicals are included in the proposed training practices over California, Oregon, Washington, and Idaho, which will definitely have adverse effects on environment and all life.	As described in the Draft EIS/OEIS, the only inshore or overland activities occur over Washington. No land or overland activities are proposed over Oregon or California.
Shane-04	I am a thirty-one year resident of the south end of Lopez Island in San Juan County, Washington, about eight miles across the water from the NAS Whidbey base and one of the most effected areas by their current practices. Over the years there has been ever increasing flight practices and noise levels to the degree of unbearable, not an exaggeration. Windows have been known to crack or break and the earth vibrates as though an earthquake were happening. There has also been fuel dumping and engine testing which is also intensely loud and at times doesn't begin til around 10:00 p.m. and will continue the entire night. Not only is this noise very stressful, but sleep is impossible. The Navy doesn't seem to have any time constraints on when they do their training or range they can practice over. Many of their flights are at extremely low altitudes and fly straight up the middle of the island and over the school. I am telling you my personal complaints to give you a realistic idea of the impact these practices already have on our environment-waters, marine life, air quality, plants, animals and humans. I can assure you that the proposed practices and increased use of	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.

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	such will have a devastating impact on all life and quality of life.	
	Aside from the environmental health and safety concerns, the real necessity of this extremely expensive program is much in question especially when our current financial situation is in such dire straits. I would hope that we can come up with more creative and constructive solutions to our national safety concerns rather than adding to this already very destructive and eroding world. Continuing to take actions that are polarizing will never bring harmony to this planet, and continuing to use fear as leverage for justification of these destructive practices will also never bring peace. Once again I urge you to take heed. Thank you for listening.	
Sherman-01	Too little public notice of Newport meeting; too little time for public comments; inadequate information at that meeting about what, where, when, how and possible affects of Navy offshore training exercises.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. Also, public review was not limited at any time during the comment period because comments could be submitted by mail at any time.
	Most importantly, the entire process of the Navy writing he EIS on its own project is seriously flawed! The Navy naturally will not find "significant impacts" (affects) of its own training exercises, it is hardly a neutral, impartial, scientifically qualified agency to judge environmental and other affects of its own project.	Each federal agency is responsible for conducting and managing its own National Environmental Policy Act (NEPA) process. The Draft EIS/OEIS is a product of independent environmental scientists and biologists contracted to produce the independent report you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis
Sherman-02	The Environmental Impact Statement on the Training Range proposal should be proposed by a panel of appropriately qualified scientists in particular marine scientist familiar with the ocean off the Northwest coast. That scientific panel should have no working, contractual, or funding connection with the Navy. The panel should be absolutely neutral and objective about this training project and make its findings solely on a factual and scientific basis.	and recommendations have been produced by experts in their respective scientific communities.
	This scientific panel should be funded and organized by some source other than the Navy and Defense Department!	
	The Navy's only role in the Environmental Impact review and conclusions should be to provide all necessary information about the details of the proposed training exercises.	
	This criticism of the Navy's EIS procedure applies to all Defense Department and other Federal agency projects where the agency desiring the project prepares its own evaluation, environmental or otherwise.	
Sherman-03	*urge the Naval Facilities Engineering Command NW to:  1) allow adequate time for the public to review and comment on this project's EIS	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Sherman-04	provide EIS paper copies to those persons not part of the computer information network-more people than you may think;	Hard copy versions of the Draft EIS/OEIS were made available to numerous agencies, libraries, and individuals that requested one.
Sherman-05	3) to pay serious attention to public comments and not shrug them off when	The Navy seriously considered every concern raised in public comments

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	they point out informed objections to various aspects of the proposed training exercises or are critical of Navy conclusions about environmental affects (impacts).	to the Draft EIS/OEIS. Each and every comment received was responded to in this Final EIS/OEIS.
Sheman-06	Finally at the Newport public meeting I requested a paper copy of the EIS Executive Summary-not the entire EIS document- that, I assume will provide all essential project and environmental information needed for informed comment. In particular, I hope to see the Navy's explanation about the factual and scientific base for your environmental impact conclusions.  Thank you for the Newport hearing on this project. Your staff was helpful, if guarded, on their answers to public questions.	The Executive Summary and was meant to provide only an overview of the impacts, not a repeat of the thorough analysis included in the resource analysis section. The data supporting the Executive Summary conclusion cited can be found in Section 3 within the main body of the EIS/OEIS.
Sherman-07	My comments are limited to: Environmental effects on marine mammals-whales, porpoises, seals and sea lions fish-particularly to Rockfish and seabirds-those in particular, which live far offshore such as murrelets and albatross these types of Navy Training Exercises: sonar, explosives, and detonations, vessel movements, disturbance by aircraft, and general comments about the Navy's environmental and other effects document procedure and public notice and comment procedure.	See responses to specific comments below.
Sherman-08	1. Sonar and Other Effects on Fish Page 3.7-37of EIS Volume 1it says that (sonar) effects on fish "are largely unknown" there is a "dearth of empirical information" "The limited information available (pg. 3.7-38) suggests that populations of fish are unlikely to be affected by projected rates and areas of military sonar use."  Given the largely unknown sonar effects on fish. I question the Navy's "unlikely to be affected conclusion. There is little or no factual basis for the conclusion.	The full quote from the sentence referred to in the comment: "With these caveats and qualifications in mind, the limited information currently available suggests that populations of fish are unlikely to be affected by the projected rates and areas of military sonar."  As written, the statement above indicates that while there is limited information, it generally points to the conclusion reached in the Draft EIS/OEIS, that significant impacts to fish from sonar are unlikely. The facts supporting this conclusion begin on p. 3.7-16 in Section 3.7.1.5 – Hearing in Fish.
Sherman-09	Pg. 3.7-6 Vol.1 states that he Oregon and Northern California waters are critical habitats for (declining) threatened Coho salmon, Pacific salmon, coastal pelagies, Pacific Groundfish, and highly migratory fish species are all designated EHF species as the Navy's training area of concern.  Pg. 3.7-14 Bocaccio are seriously declining and are overfished. This rockfish species and some others important to Oregon's commercial fishery are already under stress. They are not highly mobile and tend to occupy limited habitats.  In addition to possible adverse sonar effects, explosives and Hazardous materials from sonobuoys, submarine targets, and torpedoes could be harmful to rockfish populations and habitats. Page 3.7-26 of Vol 1 says the Navy has "no reliable data" on fish behavior resulting from underwater explosions. Pg. 3.7-30 describes potential Navy explosive effects as degradation of substrate and toxic chemicals introduced into the water column. Yet, the DEIS conclusion about effects on fish is that there will be no	The Draft EIS/OEIS does <u>not</u> state that "the Navy has 'no reliable data' on fish behavior resulting from underwater explosions" as the comment suggests.  The Draft EIS/OEIS does describe, on page 3.7-27, the quality of the scientific data that is available. This is provided so the reader can understand that the Navy has thoroughly researched the data and has used the best science available.

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	long term quality effects, that underwater explosions will be temporary and infrequent. That seems to be the questionable rationale for the DEIS conclusion.	
Sherman-10	Sonar Effects on Marine Mammals Regarding sonar effects on marine mammals this DEIS on Table 3.9-2 states the hearing abilities of various marine mammal species in KHz terms. The table does not mention sources of KHz data. A total of 32 such species are noted for presence at least at times in the Northwest specified Navy training area (Table 3.9-1)	Table 3.9-2 summarizes marine mammal hearing that is fully explained (with sources) in the following individual species descriptions.
Sherman-11	Navy states (page 2-9) mid-level sonar frequency is 1 to 10KHz.  On page 2-12 it is stated that in general functional hearing of marine mammals ranges from 10 KHz to 200 KHZ but Table 3.9-2 indicates a number of species and Dall's porpoise functional hearing is unknown including mink, sei, fin, blue, and gray whales all present in the training area. In the book Wild Blue, Dan Barolotti, St. Martins Press, 208 on page 163 it is stated that not much is known for certain about blue whale sound detection but that they seem to hear very low sound and can vocalize below 10 KHz. In general, 20 to 10 KHz may be the spectrum of blue whale vocalization. Navy mid-frequency sonar of 1 to 10 KHz would seem to interfere with blue whale hearing-vocalization. It may also interfere with No. Pacific Right Whales, Humpbacks, Sie, Fin, Minke, and Gray Whales.  Pg. 3.9-12 of DEIS Humpback Whales are found along the continental shelf break and slope and off the Oregon Coast near Hecata Banks as a feeding area (and also a prime commercial fishing area)  Pg. 3.9-9 states that blue whales feed in the southern part of the NWTRC area  Pg 3.9-27 says that gray whales can hear sound as slow as 0.1 Khz to 12 KHz and they are found in the area of concern.	The actual statement on p. 2-12 is that the hearing ranges from 10 Hz to 200 kHz. This statement is presented as a generalization to support why some sound sources are not analyzed as they would be beyond the range of hearing of marine mammals.  The Navy agrees with the remainder of the comment, and analyzed potential impacts in this EIS/OEIS accordingly.
Sherman-12	Except for gray whales, all of the above noted whales are listed as Endangered, as well as stellar sea lions and sea otters.  "Harassment" of marine mammals is prohibited by the Marine Mammal Protection Act and the Endangered Species Act (endangered marine mammals). Harassment includes potential to injure as well as actual injury and disturbance or likelihood of disturbance to animal migration, breeding, feeding, surfacing, and sheltering.  Sonar, underwater explosives, torpedoes, missiles, and vessel movements in the vicinity of whales and other marine mammals would definitely have a "potential" to injure and a "likelihood" to disturb.	Potential impacts of Navy activities on marine mammals is closely regulated under the Endangered Species Act and Marine Mammal Protection Act. The Navy has initiated consultation under the ESA and applied for a Letter of Authorization under the MMPA for such activities, and the nature and scope of appropriate mitigation measures is currently being addressed in those regulatory processes.
Sherman-13	Of particular concern is the proposed new electronic signal emitter a euphemism for a sonar station, on the Washington coast that could adversely affect offshore areas as well as the whales.	The electronic signal emitter would produce radio frequency (RF) signals above the water, with no sound or electronic energy entering the water. This system is described in Section 2.6.2.1 of the Draft EIS/OEIS.
Sherman-14	The public hearing informational booklet January-February 2009 admits that, "There is still much to learn about how marine mammals liveand respond to	The Navy disagrees that marine mammal effects are essentially unknown. A significant amount of research has been conducted that provides a

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	human activities: such as sonar, underwater explosions and vessel movements. That is an understatement. In fact, cetacean and pinniped physical and behavior effects from sonar, explosives and vessel movements are essentially unknown.	wealth of knowledge on the subject. The statement quoted in the comment cites the complexity of the issues as the reason there is still much more to learn.
	Yet, this DEIS blithely (showing a lack of due concern) assumes "no significant adverse effects" on marine animals.	Where the science expresses uncertainty, the EIS/OEIS analysts and authors used a conservative approach, which likely overestimates the effects of Navy training activities on marine mammals.
Sherman-15	Section 5 of this DEIS notes Navy Protection and Mitigation Measures including shipboard (and I assume) aircraft lookouts to spot marine animals, seabird concentrations, and marine debris. If so found, vessel movements are adjusted to avoid close proximity to the animals and training exercises such as explosions and live ammunition firing delayed or cancelled. Sonar emissions are merely "reduced" (page 3.9-51).  These protective measures are only as good as they are put into practice. If the Navy personnel and training exercise commander always strictly follows the protective protocol harm to marine animals can be avoided or, at least, minimized. But, who can assure such strict adherences to these measures? The Navy is its own "watchdog" but who "watches the watchdog"? Commercial fishing catch regulations require shipboard National Marine Fisheries Service observers to ensure compliance with such regulations. Navy marine animal protective measures have no such requirement.  Page 5-15 describes demolition and ship mine counters (protective) measures including a pre-training exercise survey within 30 minutes prior to exercise commencement. If marine animals are in the survey area, the exercise must pause until the animal(s) leave. The same "watchdog"	As described in Section 5 of the Draft EIS/OEIS, there are numerous Navy personnel involved in any exercise that all understand the importance of the mitigation procedures. These Sailors represent the U.S. population at large. They, like the rest of the U.S. appreciate the importance of sustaining the seas and the marine life that inhabits the oceans of the world. A complete understanding of their mission, the potential for that mission to impact the marine environment, and the tools to mitigate those impacts, all arm these conscientious Sailors to follow through on those measures.  To date, anecdotal evidence suggests that these mitigation measures are actually being applied more frequently, at greater distances, and for longer durations than are currently recommended.
	comment as above applies to these measures.  Vessel Movement and Marine Mammals	A section of the Draft EIS/OEIS was devoted to the analysis of the
	A leading cause of injury and death to whales, particularly to slow moving Northern Right Whales and Gray Whales—the latter especially when feeding—is ship collisions with whales. I have personally seen scars on Right and Gray whales apparently from ship screws.  Noise from ship engines also may be a hazard to whale and porpoise	potential for vessel collisions with marine mammals (pp. 3.9-91 to 92). The analysis in this section was complete and relevant to the issue.
Sherman-16	species.  Vessel movement and engine noise actual or potential conflicts with marine mammal well-being and behavior receives little attention in this DEIS except to refer to the Section 5 Protective Measures and to the infrequency of vessel operations and limited number of vessels involved in training exercises. But it takes only one vessel encountering one whale to cause death or serious injury—especially regretful if that is an Endangered species.	
Sherman-17	Birds and Training Exercise Effects  The DEIS states that sonar effects on sea birds were not studied referring to a 2003 National Marine Fisheries conclusion that sonar effects are unlikely. The DEIS states (page 3.10-21) that no evaluation of possible underwater effects on terrestrial birds was done. Nothing is said about such effects on offshore and pelagic birds much more likely to be in the vicinity of deepwater	The Draft EIS/OEIS conclusion about the potential effects of sonar on birds applies equally to all birds, as one of the key data points to support that conclusion is the short period of time that birds spend beneath the surface. Another important point is that birds are not likely to be impacted since there is no evidence that they use underwater sound. These points apply universally to birds in the study area, and support the conclusions.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS

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	training exercises than nearshore birds. Yet, on Page 3.10-20 underwater explosions (and weapons firing) are noted as potential Navy activity stressors on seabirds. Why have offshore sea birds such as Albatross, Murrelets, Auklets and Tufted Puffins not been studied for underwater and weapons firing effects?	
	The DEIS includes the above offshore sea birds as occurring in training exercise waters (page 3.10-5).	
	As the DEIS notes in Section 3.10 seabirds are protected by the Migratory Bird Treaty Act. Also, noted is the fact that seabirds in the NWTRC Study Area include two Endangered species—short tail albatross and California Brown Pelicans—and two threatened species—Western Snowy Plover and the Marbled Murrelet.	
	The pelicans, snowy plover and marbled murrelet, to my knowledge, would not be in far offshore waters where Navy training exercises will be conducted, they are nearshore birds or, in the case of snowy plovers an onshore bird.	
	The DEIS page 3.10-11 notes that there have been recent sightings of Short Tail Albatross in offshore waters within the Navy Training exercise area, although they are most often found farther north off Alaska and British Columbia. Being an Endangered Species, the Navy should do its utmost to avoid vessel and explosives contact with Short Tail Albatross.	
Sherman-18	Noise and other effects of underwater explosions carry a long distance underwater. The 600 yards Navy explosive safety zone (DEIS pg. 3.10-17) would seem to be a minimum distance to avoid harm to diving seabirds, as well as marine mammals and sea turtles.	The Navy agrees. The 600-yard area described is in fact a minimum distance. If any marine mammals, diving birds, or sea turtles are observed within this area, the activity is postponed or relocated.
Sherman-19	In fog and at night ship lights disorient sea birds and increase the chance of bird-vessel collisions. Ship lighting should be minimized where sea birds may be gathered and ship speed reduced. The DEIS makes no mention of such precautions and simply says (page 3.10-21) that there is a low potential for seabird collisions due to bird mobility and low density of Navy vessels.	The evidence presented in the Draft EIS/OEIS supports the conclusion of low potential for seabird collisions.
	Regarding Expended Materials (DEIS pages 3.10-27 and 28) such a shrapnel, small caliber ammunition, drifting balloons and plastics the latter two can be especially hazardous to birds as the DEIS acknowledges, noting that birds are known to ingest a wide variety of marine debris (and can be entangled in wires and plastics).	The Draft EIS/OEIS states that the Alternative 1 and 2 effects would be similar to the No Action Alternative. For example, entanglement is unlikely due to the type of expended material and the improbability of any animal becoming entangled. An increase in the number of these materials doesn't increase the likelihood of entanglement. The materials still
Sherman-20	Regarding the No Action Alternative the DEIS says there will be minimal impact from marine debris on sea birds because of the low concentration of such debris in the training area. There is no mention of effects on seabirds from Navy training debris of Alternatives 1 and 2. Yet Table 3.10-3 shows that Alternative 1 effects may be slightly higher (than No Action) and Alternative 2 slightly higher yet from debris ingestion – entanglement including such effects as Endangered seabirds! Yet, the DEIS mentions no extra Navy precautions taken in Alternatives 1 and 2.	present no risk (even in higher numbers), and they still sink to the bottom where they are out of reach of birds. Therefore, no extra precautions would be necessary.
Sherman-21	NWTRC Marine Species Monitoring Plan Part 5 of the DEIS refers to a Navy monitoring plan for marine mammals	Avoidance is part of the Navy's mitigation. Many of the mitigation measures require the Navy to avoid sighted marine mammals during the

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	mostly that are covered by the Endangered Species Act and the Marine Mammal Protection Act so as to evaluate species abundance and distribution. Assessing potential Navy training exercise mitigation measures is a stated purpose. Rather than mitigation the DEIS should refer to avoidance measures. If training exercises are harmful to species including those endangered it is preferable to avoid harm rather than to attempt to reduce harm.	conduct of their training activities.
Sherman-22	This monitoring plan is to be annually reviewed by Navy biologists. What about review and plan preparation involving non-Navy biologists and marine scientists?	The marine mammal monitoring plan is reviewed by the National Marine Fisheries Service (NMFS). Additionally, Navy annual reports used by NMFS for the Marine Mammal Protection Act process will bemade available to the public by NMFS.
Sherman-23	Which leads to this criticism of the entire Navy training exercise Environmental Impact Statement process (rather than specific parts of the Draft report).  The Navy is judging environmental effects of its own training exercise program. The "fox guarding the henhouse" situation. Making it a certainty that the Alternative the Navy prefers will be chosen. There is no objectivity and fairness about this procedure.  A procedure combining scientific expertise with objectivity, judging the subject of this DEIS entirely on its merits with no built-in favorable bias would include, if not be entirely done by, non-Navy academic and marine science institute experts with no self-interest in the environmental effect analysis outcome, would be far more reassuring to the concerned public.  Realizing that the National Marine Fisheries Service has a role in evaluating this project's environmental effects and that outside academic scientists can comment on the DEIS document, that is not as reassuring as the above suggested objective, non-Navy in-house document preparation.	Each federal agency is responsible for conducting and managing its own National Environmental Policy Act (NEPA) process. The Draft EIS/OEIS is a product of independent environmental scientists and biologists contracted to produce the independent report you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
Sherman-24	A final point, again about procedure  The Navy could have held one or two more public information meetings in Oregon this past winter and provided better meeting public notices. Too many concerned Oregonians heard about the meetings at the last minute and/or through informal means.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification efforts.
Sherman-25	Thank you for the opportunity to comment on the Draft Environmental Impact Statement Navy Northwest Training Range Complex. I hope that everyone's comments will be considered in the Final EIS.  I asked at the Newport, Oregon public meeting to be placed on your mailing list (not email). So far no response.	The Navy seriously considered every concern raised in public comments to the Draft EIS/OEIS. Each and every comment received was responded to in this Final EIS/OEIS.  You have been added to the mailing list.
Shomer-01	I intended a more detailed, personalized comment but there simply isn't time	The proposed action of this EIS/OEIS does not include NAS Whidbey

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	enough ahead of the hasty deadline. As a 40-year resident near the NAS-Whidbey air field, I have called the base hotline many times with concerns about noise of low overflights, late-night exercises, and spoken with more than one Base Commander over the years. I am also concerned with the health and survival of marine mammals that will be impacted by the proposed activities' expansion, and with pollution of our airshed in northern Puget Sound from fuel dumping, tire-burning and other activities 'exempt' under Bush Administration rules.	Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
	At a time of financial crisis our country should not be expanding these activities, but rather, scaling down to a sustainable level. LESS activity, FEWER exercises does not have to mean poorer security! Quality, not quantity. Save the strategic oil burned during these exercises, the country will need the oil soon enough, to be sure.	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of
	The impacted population areas deserve more notification and public hearings on these issues which will affect every person in the region. NO ACTION ALTERNATIVE, PLEASE!	weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
	I support the following:	
	Port Townsend Concerned Citizens	
	I support the "no action alternative" (maintaining existing training levels) in regards to the expansions planned by the Navy for its Northwest Training Range Complex.	
	The readiness exercises involve the Northwest fleet including two aircraft carriers, 10 warships, 14 submarines, 90 support vessels and 119 aircraft based at five installations in Washington state Navy practice includes using high-powered and explosive sonars, missiles and munitions.	
	According to the Oregonian article Navy plan to increase warfare training off Oregon coast draws objections by Scott Learn & Lori Tobias "The biggest environmental concern is the Navy's use of mid-frequency active sonar, which would increase under the plan. Sonar use damages whales and other marine mammals that use sound to communicate and navigate." The training area includes waters used by nine marine mammal species listed as threatened or endangered including seven whales. Of particular concern are Puget Sound's southern resident killer whales, whose population has dwindled to about 70.	
	In its review, the Navy said sonar exposure contributed to five "mass stranding events" worldwide since 1996, with whales showing up dead in numbers on the beach. The review says the increased training would boost potentially harmful mammal sonar exposures from about 110,000 a year to nearly 130,000. The Navy has rejected the idea of seasonal shutdowns or avoiding key habitat areas.	
	As important as training is to the Navy, we support the No Action Alternative due to the proposed testing of new weapon systems and the lack of information available to assess the impact on numerous endangered and declining marine species.	
Sierra Club (Sierra)-	The 132 Members of the Curry Section of the Sierra Club located on the	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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01	Coast in Curry County Coast in Southwestern Oregon are concerned with the increased activity of the Navy in our area. Worldwide stocks of fish are	proposed action does not include expanding the range complex, but in continuing training in the same area as they have since World War II.
	decreasing at a rapid rate and anything that the Navy can do to decrease the impact on these populations would be helpful. We are also concerned that the potential damage to mammals and birds will have a significant negative impact on tourism along the coast. In addition to protecting citizens of the United States, an increased effort to protect the wildlife that feed us is important for our long-term survival. We will propose some suggestions to decrease the collateral damage to our wildlife and assure the quality of life for the residents of our coastal communities.	As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitation to simulated training that necessitate live training, such as that in the NWTRC.  The recommendation concerning smart technology in non-explosive shells is appreciated, but that technology does not currently exist.
	1. Alternatives to live rounds	
	It makes no sense for the Navy to propose larger gunnery areas off the Northwest coast. They have assumed that only a "few" fish, mammals and birds will be affected. With all the problems we have had on the West Coast with declining fish populations we believe that the acceptable amount of deaths of fish is none! The Navy already has land gunnery ranges where live rounds can be fired. With today's simulator technology the training of operators of this equipment will get better training than they would if firing a few rounds and damaging addition fish off our coast.	
	Another possibility for the Navy would be to employ smart technology in target practice. Use non-explosive shells fitted out with electronic packages that could tell exactly where the round landed and feed the information back to the operator instantly. Also be sure to include flotation devices so the helicopter pilots could get practice picking up these smart projectiles for reuse. Surely the Navy has enough creative ability to find some ways to reduce their environmental impact while keeping sailors honed for battle.	
	2. <b>Timing and location of practice</b> The areas near to the coast provide great habit for more wildlife than areas in the middle of the ocean. We would propose that the area be at least 100 miles from the shore to better protect this wildlife.	The Navy shares your concern for marine life. As described in the Draft EIS/OEIS, the Navy implements protective measures during its training exercises. The Navy is a leader in funding marine mammal research to better understand them and to operate with the least possible impacts.
Sierra -02		Alternatives that have been considered but eliminated includes the limitation of sonar area. However, this would not make for adequate training scenarios.
		To prevent harm and train effectively, mitigation measures are implemented. The Navy's protective measures are effective at mitigating, not eliminating, risk to all natural resources.
Sierra -03	In addition the Navy could time the training activities to avoid whale migrations and bird migrations.	Section 5.2.1.5 of the Draft EIS/OEIS explains why seasonal restrictions are not a viable mitigation measure.
Sierra -04	3. Independent Fish and Wildlife Study  We would propose that the Navy hire independent wildlife and environment experts to study these activities and make recommendations on how the Navy could reduce their impact on this crucial wildlife. A report to the general public and the Navy's response to these suggestions would go a long way to convincing the public that the Navy is reducing its environmental impact. Baring an independent report perhaps the Navy could utilize existing	Each federal agency is responsible for conducting and managing its own National Environmental Policy Act (NEPA) process. The Draft EIS/OEIS is a product of independent environmental scientists and biologists contracted to produce the independent report you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.

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	personnel trained in these issues to develop a report to perform the same function as explained above.	
Sierra -05	4. Delay and Public Education  We would suggest that the navy allow for six months delay so that they can provide more public education up and down the whole Northwest Coast and receive public input on their decisions. It seems like the Navy is just trying to ramrod this thing through with minimal public knowledge. The citizens of the Pacific Northwest deserve better.  Summary  Environmental impact Reports are more than just a written report to get through. They can be very useful for taking new directions. The Navy as well as all citizens of the United States must learn to live in a more environmentally friendly way. We would propose that the Navy has the talent and creativity to help making these changes and a great place to start would be decreasing as much damage to wildlife along our Northwest Coast.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Therefore, no further delays or extension are necessary.
Sinkyone-01	The InterTribal Sinkyone Wilderness Council (Council) is an incorporated 501(c)(3) Tribal conservation organization comprised of ten Federally Recognized, Sovereign California Indian Tribes that retain and maintain important cultural ties to the coastlines of, and the ocean waters adjacent to, Mendocino and Humboldt Counties.  The Council was founded in 1986 by, and for the benefit of, its member Tribes and is charged with protecting the cultural-ecological resources that constitute the heritage of the indigenous Tribal Peoples of the historic Sinkyone Tribal territory, which is located within southern Humboldt and northern Mendocino Counties, from the coastline to the ridges parallel to and immediately east of the S. Fork and mainstem of the Eel River.  The Council's constituent Tribes are: Cahto Tribe of Laytonville Rancheria; Coyote Valley Band of Pomo Indians; Hopland Band of Pomo Indians; Pinoleville Porno Nation; Potter Valley Tribe; Redwood Valley Band of Pomo Indians; Robinson Rancheria; Round Valley Indian Tribes (a Sovereign Nation of 7 Confederated Tribes); Scotts Valley Band of Pomo Indians; and Sherwood Valley Band of Pomo Indians. Each of these Tribes is a Sovereign Nation that maintains its own government-to-government relations with the United States of America.  The Tribes' connections to the marine resources and waters of this region are ancient and well documented, and these connections are indisputably vital to the culture, sustenance, health, and continued wellbeing of the Tribal members of this region.  The U.S. Navy's Northwest Training Range Complex contains numerous marine species, as well as anadromous species, that are culturally important to Tribal Peoples of both the coastal and the inland regions of Mendocino and Humboldt Counties. The species that would be affected by the proposed expansion of the U.S. Navy's Northwest Training Range Complex include species that are Endangered and Vulnerable.  The U.S. Navy's draft Environmental Impact Statement (EIS) for the	The Draft EIS/OEIS describes the potential "take" of 26 species of marine mammal, not 37 as suggested by the comment. The term "take," as defined in Section 3 (16 USC 1362) of the MMPA, means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." The Navy anticipates only harassment and the potential for injury due to its training activities.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have sin/.ce World War II.

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	proposed expansion of the Northwest Training Range Complex and the U.S. Navy's August 2008 Request to the National Marine Fisheries Service (NMFS) for Authorization for the Incidental Harassment of Marine Mammals, specifically include the ability to "take" 37 species of marine mammals (i.e., whales, dolphins, and seals) that could be impacted by the expansion beginning in 2010.	
Sinkyone-02	This authorization includes the "authorization to take, by injury or mortality, up to 10 individual beaked whales"} The U.S. Navy's request to NMFS for Authorization for the Incidental Harassment of Marine Mammals may in fact result in the "take" of more than 2 million individual sea mammals as a result of the proposed expansion.	The Navy is <u>not</u> requesting mortality takes of any whales or any other marine mammals.  Although NMFS and the Navy agree that injury of marine mammals is unlikely when mitigation implementation is considered, the Navy's model predicted that (in the absence of mitigation) 13 individuals would be exposed to levels of sound or pressure that would result in injury and NMFS is proposing to authorize those Level A Harassments. No mortality is anticipated and NMFS is not proposing to authorize mortality.  Tables 3.9-6 through 3.9-12 in the Draft EIS/OEIS list the number of modeled exposures. The total number of all takes, including non-injurious harassment, is less than 130,000 per year, or less than 650,000 over 5 years.
Sinkyone-03	The term "take" suggests a high probability of death for sea mammals exposed to the Naval exercises scheduled under the proposed expansion, and should be considered as nothing less than a euphemism for the U.S. Navy's authorization to KILL these sea mammals.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Sinkyone-04	The Council holds fee title to and manages the 3,845-acre InterTribal Sinkyone Wilderness property, which is located adjacent to the coastal Sinkyone Wilderness State Park. The Sinkyone Wilderness area is in the extreme northern part of Mendocino County, within the portion of the Northwest Training Range Complex that apparently extends approximately 2 to 3 miles into Mendocino County. Our InterTribal Wilderness land is located at the very southernmost extent of the Complex. However, our area of geographic concern extends much farther north than the property to which we hold title. Aboriginal Sinkyone territory extends along the coastline from approximately 3 miles south of the mouth of Usal Creek in Mendocino County, thence northward to the mouth of Four Mile Creek in Humboldt County, which is located just south of the mouth of the Mattole River.  The U.S. Navy's proposed expansion would result in irreversible impacts to the many sensitive coastal resources along the entire coastline of the historic Sinkyone territory, including seaweeds, shellfish, rockfish, and a host of other animal and plant species that would be negatively affected by the proposed increase in training activities.	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California. Also, no training involving live explosives take place within 3 nm of shore. The analysis of the resources listed in the comment is contained in Chapter 3 of the Draft EIS/OEIS.
Sinkyone-05	These coastal resources, along with the marine resources and waters, constitute a critical part of the cultural heritage and aboriginal rights of the	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to

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	Tribes of this region who continue to rely upon them for sustenance and	continue training in the same area as they have since World War II.
	ceremonial usage.  The Tribes of this region never ceded their aboriginal rights, including their rights to steward, protect, harvest, and utilize marine and coastal resources that are necessary for the preservation and the continuation of our way of life.	The Navy has met all requirements for tribal consultations.
	The U.S. Navy's proposed expansion of the Northwest Training Range Complex would infringe upon and threaten marine and coastal resources important to the Tribes and to the general population of this region. In addition, we believe the Navy has failed to adequately consult with the Tribes of Northern California, as required by law, regarding its proposed expansion.	
Sinkyone-06	In our opinion, the draft EIS is replete with inadequacies, contradictions, lack of reliable data, and insufficient mitigations, which together are too numerous to catalogue.  Due to the shortfalls of the Navy's proposal, the expansion is certain to cause irreparable harm to the ecological, cultural, economic, recreational, and scenic values of Mendocino and Humboldt Counties' marine and coastal areas.  The InterTribal Sinkyone Wilderness Council is adamantly opposed to the U.S. Navy's expansion of the Northwest Training Range Complex and is advocating for the No Action Alternative as outlined in the EIS.	This comment has been duly noted. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Sinkyone-07	The Navy should entirely withdraw its plans for the proposed expansion of the Northwest Training Range Complex now and henceforth. Instead, it should instead develop plans for reducing its training and testing activities within the Northwest Training Range Complex, thus contributing to the healing and revitalization of our ocean waters and all the life that they contain.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Slama-01	I vehemently protest the Navy's plans to kill the marine life and poison our waters, air and soil in Washington, Oregon and California.  This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  No land areas outside the state of Washington are included in the NWTRC. The only airspace over a state other than Washington is a 60 nm² piece of a Military Operating Area that extends over northwestern Idaho.  There are different levels of "take." The Navy does not anticipate any mortality takes, but only harassment takes.
Slama-02	It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the "Navy Warfare Chemical Menu- that will contaminate our air, water, and soil.	The potential impact of all hazardous materials is analyzed in Section 3.3 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to

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		public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Slama-03	White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout ofWhite Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996) Please do NOT do this!!!	White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Smith-01	[Attachment only – 67 pages of signed petitions]	No response required.
Smith J-01	I would like to request communications with the Navy before or after training flights near Cape Mendocino-Petrolia or the Mattole River.  In recent years low level flights frightened livestock with resulting serious injuries. I would like contact numbers for the Navy/Public Affairs so I can communicate directly on behalf of my constituents. The same would be requested for inquiries related to commercial fishing activities.  Thank you for the opportunity to comment.  In notice to mariners etc, could you please notify the Humboldt County Board of Supervisors at the address above [Jimmy Smith, Humboldt County Board of Supervisors if Navy activities are expected in Humboldt.	The Navy does not expect any of its activities to have a negative safety impact on any fishing, commercial or recreational activities. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy would coordinate with representatives from the fishing fleets. Notice to Airmen (NOTAMs) and Notice to Mariners (NOTMARs) will continue to be issued when training dictates such a warning.
Smith R -01	This is a response to your request for public input on the Environmental impact to neighbors and civilians living near west coast Naval Facilities.  We have lived in the Whidbey Island Air Stations flight pattern for over 20 years. The days of Catalina type sea planes are gone as well as any calm and quiet. We have aircraft activity overhead, at all hours-day and night.  The noise volume keeps getting louder with the newer model aircraft. Has anyone done a decibel test in our school/residential communities here?  Testing for noise by aircraft have closed down other Naval Aircraft facilities, i.e. Miramar (long time home of the Blue Angels) & the Tustin Marine Air Station-Calif.  Most of the west coast Naval Facilities were built before or during WWII.  Most have under gone major upgrades to adapt to the changing equipment needs.  Rather than upgrade outdated facilities-why not spend that money on new top of the line facilities. Use today's technologies, to create a top of the line facility, not ideas and equipment 70 years old. Also develop sound reduction	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.

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	control for your future needs and neighbor good-will. Increasing military activity will not improve public opinion of aircraft noise or hazards.	
Smith S-01	What responsibilities do you have to analyze your activities in terms of global warming, energy use and pollution?  Your activities, in my opinion, need to contribute to saving this planet- not destroying it as fast as Congressional dollars flow to you. To me your military activities are far less important than preserving our fishing opportunities, the diversity of our oceans.  I am concerned that with taxpayer dollars you are one of the worst offenders and care very little about taking up these burdens shared by many others.	This comment has been duly noted.
Smith Sh-01	Our coast is already compromised by humans (we are not blaming our Navy) and many species damaged (no commercial salmon fishing this season). Many residents are working hard to restore the damage in the watersheds and on the coast. The Navy's "increase in training frequency" poses further damage to areas we are working so hard to restore. We are humans, we have to do better.	This comment has been duly noted.
Spencer-01	I am writing this letter to register my opposition to the Navy Warfare Testing program Expansion on the coast of northern California.  Historically our costal waters have been home to some of the richest and most diverse plant and animal life in the oceans of the world. In this era of declining resources and increasing risk to our planet we can not afford to put our costal ecosystem at further risk. It is short sighted and irresponsible.  As a U.S. citizen and voter I vote NO to the Navy Warfare Testing Program Expansion.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Spraitzar-01	We need citizen oversight & input of/on Navy activities.	Civilian oversight and control is in fact a foundation of the U.S. military. As Commander-in-Chief, the President of the United States, a civilian, makes ultimate decisions about the training and operations of all U.S. military forces.
Spraitzar-02	There have been difficulties in accessing your project website and submitting comments. I feel & request we need an extension of the public review period.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Spraitzar-03	The Navy needs to provide public access to non-classified ambient acoustic information to confirm compliance with their operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Spraitzar-04	Consider doing land based ordinance/weapons in Nevada desert.	The levels of training described in this EIS/OEIS are those determined by the Navy as necessary to meet the needs of the forces that routinely train in the NWTRC. As described in the Draft EIS/OEIS on pages 1-7 through 1-9, various attributes of the NWTRC are necessary for training Navy forces. Although significant training is conducted outside of the NWTRC, including ranges in Nevada, routine training requirements dictate that some level of training must take place near the locally-based ships,

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		submarines, and aircraft.
Spraitzar-05	The Navy needs to thoroughly and <u>accurately</u> identify all the negative environmental impacts already present due to NAS Whidbey activities before adding new activities.	The purpose of the No Action Alternative described in the Draft EIS/OEIS is to provide an "environmental impact analysisto ensure that agencies compare the potential impacts of the proposed major Federal action to the known impacts of maintaining the status quo." (Draft EIS/OEIS p. 2-13)  The analysis conducted in the Draft EIS/OEIS thoroughly and accurately identify the environmental impacts of the No Action Alternative (the impacts due to present activities). However, airfield activities are not part of the proposed action. The proposed action focused on training and Research, Development, Test & Evaluation (RDT&E) activities conducted in the range complex.
Steele-01	Request a public hearing regarding the U.S. Navy testing on the Mendocino Coast regarding the environmental impact it has on our sea life and the environment as a whole.	The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County is outside of the boundaries of the range complex, and the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations and notification efforts.
Suquamish-01	This letter transmits the Suquamish Tribe's (Tribe) comments pertaining to the proposed Northwest Training Range Complex Expansion project which is located within the Tribe's Usual and Accustomed ("U & A") fishing grounds and stations. Please note that the primary portion of the document reviewed was that which pertains to the inshore area. The Tribe requests a government-to government meeting to discuss our comments on the Draft Environmental Impact Statement (DEIS).  Ethnographic and archaeological evidence demonstrates that the Suquamish people have lived, gathered food stuffs, ceremonial and spiritual items, and hunted and fished for thousands of years in the range expansion area (personal communication, Dennis Lewarch, 2008). The 1855 Treaty of Point Elliot outlined articles of agreement between the United States and the Suquamish Tribe. Under the articles of the treaty the Tribe ceded certain areas of its aboriginal lands to the United States and reserved for its use and occupation certain lands, rights and privileges and the United States assumed fiduciary obligations, including, but not limited to, legal and fiscal responsibilities to the Tribe.  An aboriginal right retained under the Treaty includes the immemorial custom and practice to hunt, fish, and gather within the usual and accustomed grounds and stations, which was the basis of the Tribe's source of food and culture. Treaty-reserved resources situated on and off the Port Madison Indian Reservation include, but are not limited to, fishery resources situated within the Suquamish Tribe's U&A fishing area. The Suquamish Tribe's U&A extends well beyond the boundaries of the Port Madison Indian. The U&A fishing places of the Tribe include marine waters of Puget Sound from the northern tip of Vashon Island to the Fraser River in Canada, including Haro and Rosario Straits, the streams draining into the western side	See responses to specific comments below.

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	of Puget Sound and also Hood Canal.	
	On February 12, 1974, U.S. District Court Judge Boldt ruled that treaty rights entitled Indian Tribes to half of the harvestable fish running in their traditional waters, a right which was later affirmed to include shellfish and other natural resources. The ruling established Washington State's federally recognized Indian Tribes as co-managers (with Washington Department of Fish and Wildlife) of fisheries resources within their U&A fishing areas. The Tribe currently enhances the Puget Sound fisheries for all-tribal, non-Indian commercial, and sports fishing-and has had strong support from groups enabling a quality enhancement fisheries program. The Tribe releases in excess of 5 million fish per year into the Puget Sound system.  Beaches are also of critical cultural significance to the Tribe as many tribal members continue commercial, ceremonial and subsistence harvesting of shellfish. As a resource co-manager, the Tribe is active in participating in the	
	environmental review process within its U & A. The Tribe not only has the right to fish but also the right to preserve and maintain the resource. Thus, our standard for review is based on the protection and maintenance of resources as well as the Tribe's right to fish and harvest.  General and specific comments on the DEIS are provided below.	
Suquamish-02	This project appears to be another phase of range expansions recently proposed by the Navy. The Tribe is concerned that the Navy is piecemealing projects. For example, the outer coast expansion is adjacent to an expansion that is currently undergoing NOAA concurrence, SEPA/NEPA rules state specifically that environmental review should not be fragmented to "avoid discussion of cumulative impacts" or to "segment and avoid present consideration of proposals and their impacts." These projects could have been combined and made the environmental review of the cumulative project impacts more visible as well as resulting in increased efficiency.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  (The Navy assumes in the following response that the other action referred to in the comment is the NAVSEA NUWC Keyport Range Complex EIS/OEIS.)  The two actions, although overlapping, involve very different activities, Fleet training on the NWTRC and RDT&E on the NAVSEA NUWC Keyport Range Complex, respectively. The activities at the two range complexes are neither interrelated nor interdependent. The Navy is ensuring NEPA and EO 12114 compliance for both actions. NUWC Keyport activities are evaluated in the cumulative impacts section of the NWTRC EIS/OEIS.
Suquamish-03	The DEIS requires additional language that that addresses the Navy's intention and process by which it will address treaty fishing access and avoid impacts to treaty fishing rights as well as cultural resources. This language, under separate heading other than cultural resources (Tribal Fishing and Uses for example), should include satisfactory measures for coordination/communication to avoid impacts to treaty fishing areas and/or activities. Items requiring coordination/communication include but are not limited to schedule location of activities and location of any structures or potential hazards. An established process (including establishment of contact persons) for coordination/communication will minimize future conflicts and possible disputes between the Tribe and the Navy concerning conflicting uses within the area and additional vessel traffic. In order for the Navy to receive Tribal concurrence on the project, the Tribe must be satisfied with the proposed measures. The Keyport Range Expansion developed a	The Navy has attempted to set up a meeting to discuss these issues with the Suquamish Tribe.

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	communication process that seems to be working for both the Tribe and the Navy and we expect that something similar will be developed and applied to the inshore area.	
Suquamish-04	There was no discussion on potential alternative sites. Were all reasonable alternatives considered? Was the range expansion sited in an area that would result in the least environmental impacts?	As mentioned above, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Alternative locations for the Navy's continued activities were considered, but were not carried forward for further analysis. Please see Section 2.3.2.1 of the Draft EIS/OEIS for a full explanation of this and other alternatives eliminated from further consideration.
Suquamish-05	The Tribe requests that a baseline bathymetric survey and environmental assessment (including surface sediment sampling) be completed in the area, so that any unforeseen problems can be identified now and addressed later in the process if needed. If sediment samples have been collected, the data needs to be included in the DEIS. Periodic monitoring would give the Tribe and agencies some assurance that if there are impacts they would be identified prior to the site becoming a health hazard. There was no discussion of the anticipated total amount of materials that will be deposited on the benthic environment and how that will affect or change the bathometry. How will the debris affect shellfish/crab/geoduck populations? How will the debris affect Tribal harvest of geoduck?	Sampling as described would provide insight only in the specific area in which the sample was taken. With over 122,000 square nautical miles of OPAREA, it would be unfeasible to sample a meaningful portion of the range complex.
Suquamish-06	There was no discussion of the anticipated total amount of materials that will be deposited on the benthic environment and how that will affect or change the bathometry. How will the debris affect shellfish/crab/geoduck populations? How will the debris affect Tribal harvest of geoduck?	Table 2-10 in the Draft EIS/OEIS lists the expended materials that would be used annually under each alternative. Unless described as retained or recovered, the expended material remains on the ocean floor after use. The impacts to the species listed is described in Section 3.6 – Marine Plants and Invertebrates.
Suquamish-07	The DEIS provides a list of potential species that may occur but this does not provide specific information that will show potential adverse affects to different populations. Listed below are links to several groups that have beach seine and nearshore data for Whidbey Island:  http://www.skagitcoop.org/index.php/research/ http://www.islandcountymrc.org/admiralty stewardship.html http://www.whidbeywatersheds.com/near shore study.html http://www.beachwatchers.wsu.edU/island/projects/index.htm	Beach seine data was not incorporated into the EIS/OEIS information. The information on presence of species in the project area was obtained from a variety of sources, including the National Marine Fisheries Service and the Washington Department of Fisheries.
Suquamish-08	The sonar discussion associated with assessment of both direct and indirect effects lacks detail. For example, what are the standards and requirements of various testing/training scenarios?	Additional discussion has been added in the Final EIS/OEIS concerning both direct and indirect effects. All pertinent information concerning testing/training scenarios is included.
Suquamish-09	The underwater minefield discussion was not detailed enough environmental bathymetric impacts (direct and indirect)?	The underwater minefield analysis covered only the activities associated with training at an underwater minefield. A follow-on environmental study will be required once the location of the minefield has been determined. It will be in this later study that more details on bathymetric impacts will be analyzed.

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Suquamish-10	The EIS discusses future use of new weapons systems/platforms. Unfortunately, unless those future uses can be discussed/analyzed in some fashion in this EIS, a new EIS to address these future uses should be required.	Each new system is described in Chapter 2 under Section 2.5 or 2.6. In each resource section (3.1 through 3.16) these systems were considered in the analysis of effects as either Alternative 1 or Alternative 2.
Suquamish-11	The Tribe would like to review a copy of the BA when it is completed. Subsequent to our review we reserve the opportunity to provide additional comments on the potential effects of the proposal and may request additional consultation. Additional consultation may also be requested if the use or intensity of use changes within the existing or proposed expansion area.	The Navy will release the Biological Evaluation (BE) to the Suquamish Tribe following the completion of consultation with U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).
Suquamish-12	Section 1.6.3 - Regulatory Agency Briefings  The Navy held a series of regulatory agency briefings between September 7 and September 27, 2007 with NOAA, NMFS, USFWS, and WDNR. Why was WDFW and the Tribe not included in these meetings? In addition to having site specific information on the proposed expansion areas WDFW and the Tribes are co-managers of the fisheries resources. Not including WDFW and the Tribes was a significant failure/gross oversight by the Navy.	The Navy has attempted to set up a meeting to discuss these issues with the Suquamish Tribe.
Suquamish-13	Table 3-2 Table 3-2 appears to be incomplete. Vessel movements (disturbance/collisions) do have the potential to impact water resources. Land-based training does have the potential to impact water resources, marine mammals, and birds. High explosive ordinance (land and underwater) does have the potential to impact geology and soils, water resources and marine mammals.	The table has been edited to acknowledge that explosive ordnance may affect water resources.  Naval vessels do not discharge fuels when underway. All discharges from navy vessels are strictly controlled under Navy operations instructions (OPNAVINST 5090.1C, 2007), as described in section 3.4, Water Resources. Emergency spill response and planning is also provided for under Navy instructions.  The effects of land-based training activities are described in sections 3.1, Geology and Soils, and 3.11, Terrestrial Biological Resources. Landbased demolition training is conducted in a confined area designed and managed specifically for this activity. Impacts, other than noise, are not anticipated to occur outside the training area.  The effects of high-explosive ordnance are discussed in several sections, including section 3.1, Geology and Soils, and in biological sections 3.6 through 3.11.
Suquamish-14	3.1.1.2 Current Requirements and Practices The EIS states "the Navy currently monitors and will continue to monitor the condition of soils and vegetation in its operating areas." What are the specifics of this monitoring plan?	The monitoring is directed by a Navy Instruction (OPNAVINST 5090.1C – Environmental Readiness Program Manual). Integrated Natural Resource Management Plans (INRMP) are a major component of the monitoring that occurs on Navy land areas. The INRMP can address land management issues such as ecosystem management, wetlands and watersheds, estuaries, soil and water conservation, biodiversity, grounds maintenance, nonpoint source pollution control, landscaping, agricultural uses and potential, fire management, insect and disease management, rangeland conditions and trends, management for multiple use, critical habitats and other areas of special interest.
Suquamish-15	3.3 Hazardous Materials The hazardous materials section was one area where it was particularly	In addition to the factors discussed in the fate of hazardous materials (Draft EIS/OEIS pages 3.3-8 to 13), the metals that tungsten is alloyed or sintered with influence it's behavior (e.g., cobalt) as does competition for

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ID	apparent that the Navy had not completed a comprehensive unbiased, up to date literature search. Many of the citations were old, outdated and may be somewhat biased.  Hazardous Materials The fate and transport discussion for both tungsten and ammonium perchlorate was erroneous and effects were not discussed. Tungsten dissolves quickly and does have the potential to migrate to groundwater - it should be noted that the Army no longer uses tungsten. Ammonium perchlorate is extremely water soluble and dissolves quickly making it very mobile.  Tungsten and cancer effects are a big issue and needs further discussion. Tungsten is no less toxic or mobile than lead ammunition, one implantation study of tungsten alloy shrapnel pellets in rats produced cancers at all sites of	binding sites from other substances (e.g., phosphate) (Thomas et al. 2009; ATSDR 2005).   The final EIS/OEIS section 3.4 Water Resources has been edited to include the information below on ammonium perchlorate. Section 3.3   Hazardous Materials refers the reader to the full discussion in 3.4 Water Resources.   "In water, ammonium perchlorate rapidly dissociates into its ionic components – ammonium (NH <sub>4</sub> $^{+}$ ) and perchlorate (ClO <sub>4</sub> $^{-}$ ) "does not readily adsorb to soil particles or to organic matter, and does not readily form ionic complexes with other materials in solution." Because of these characteristics, perchlorate is highly mobile in soils and does not readily leave solution through chemical precipitation (ATSDR 2008). Natural
	implantation (Kalinch et al. Embedded Weapons-Grade Tungsten Alloy Shrapnel Rapidly Induces Metastatic High-Grade Rhabdomyosarcomas in F344 Rats. Environmental Health Perspectives. Volume 113, No.6, 2005). Tungsten has also been potentially implicated in the significantly elevated level of childhood leukemia cases (16 cases) in Fallon, NY near Naval Air Station (NAS) Fallon and the NAS ranges (P.R. Sheppard et al. Elevated tungsten and cobalt in airborne particulates in Fallon, Nevada: Possible implications for the childhood leukemia cluster. Applied Geochemistry 21,2006 pp.152165.) and (A. Koutsospyros et.al. 2005. A Review of tungsten: From environmental obscurity to scrutiny. Journal of Hazardous Materials 136, 2006. pp.1-19).  Many people are familiar with DOD's use of depleted uranium (DU)	sources of perchlorate include caliche ore (USEPA 2008) and ozone oxidation of atmospheric chlorine (Petrisor and Wells 2008). Martinalengo (2006) stated that perchlorate was present in seawater at levels ranging from less than 0.07 μg/L to 0.34 μg/L. "However, no natural degradation processes for perchlorate have been conclusively identified(It) may be degraded by anaerobic bacteria, but the presence of sulfates and nitrates limits the process." Studies indicate that it may accumulate in living organisms (e.g., fish, plants) (ATSDR 2008). Research by Martinalengo (2006) found that perchlorate can concentrate in marine algae from 200 to 5000 times, depending on the species. Perchlorate is also known to adversely affect plants, although the mechanism is not known (USAF 1998)."
	penetrators in armor-piercing anti-tank weapons on ranges, but DOD also uses tungsten alloy penetrators as well as DU. Levels of tungsten in soil of about 5500 mg/kg have been reported in areas where tungsten penetrators have been used on ranges (Nikolay Strigul, et.al. Effects of tungsten on environmental systems. Chemosphere, 2005.).	Various sections in the comment refer to the impacts of tungsten based on: 1) its movement in terrestrial environments, 2) studies of tungsten implants, and 3) inhalation of tungsten and cobalt dust. Only limited comparisons are appropriate between the potential terrestrial impacts of tungsten and the fate and potential impacts of tungsten in a saltwater environment. [See additional discussion re: Strigul et al. (2005) below.] The other two scenarios – tungsten shrapnel and inhalation of tungsten dust – are not likely. Regarding the situation cited in Fallon, NV, the final report indicated that no proof existed that tungsten was the cause of the leukemia (CDC 2003).
		Regarding Strigul et al. (2005), as noted above, only limited comparisons are appropriate between the potential terrestrial impacts of tungsten and the fate and potential impacts of tungsten in a saltwater environment. At a minimum, the presence or absence of oxygen and the chemical makeup of seawater will influence the behavior of tungsten (ATSDR 2005). In addition, the amount of tungsten-based training materials proposed in the EIS and the area across which they would be distributed makes comparisons inappropriate to the levels of tungsten discussed in Strigul et al. (2005).
Suquamish-16	Explosives Issues of solubility and dissolution rate are not clear. Please add additional text to clarify. The dissolution rate is more important as effects are below	Solubility and dissolution rate are different measures of the same process. Because solubility and dissolution rate are different measures of the same process, the dissolution rate cannot "enhance or suppress

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	those of solubility. It is the dissolution rate that can enhance or suppress solubility and therefore affect bioavailability and mobility in the environment (Larson et.al. Dissolution, Sorption, and Kinetics Involved in Systems Containing Explosives, Water and Soil. Environmental Science and Technology. Vol 42, No.3, 2008). Low solubility does not mean chemical is immobile (i.e. RDX).  TNT degrades to aminodinitrotoluene not dinitrotoluene (Patrick van Beelen et al. Reduction of the Explosive 2,4,6, - Trinitrotoluene by Enzymes from Aquatic Sediments. Environmental Toxicology and Chemistry, Vol 14, No 12, pp 2115-2123,1995) and (Elovitz and Weber. Sediment-Mediated Reduction of 2,4,6 - Trinitrotoulene and Fate of the Resulting Aromatic amines. Environmental Science and Technology Vol 33, No 15, pp. 2617-2625,1999). ElS discusses degradation as a result of exposure to sunlight. There is likely limited light available below a depth of 40'-50'.  The biodegradation of RDX needs clarification. Under fairly anaerobic conditions and with a large amount of excess nutrients, RDX can be biologically degraded in soil such as composting systems and in groundwater with additional nutrients such as emulsified oil substrates. If local conditions are aerobic (in groundwater for example), not anoxic or anaerobic, no significant degradation of RDX occurs.  Please clarify that blended explosives degradation and/or dissolution is slowed (usually due to binding agent - wax) however, this does mean that they will remain in the environment for a very long time (longer than without the wax binder).	solubility." The commenter is correct that low solubility does not mean that a material is immobile. This is why information such as that presented in Table 3.3-5 is provided. However, there is no direct connection between solubility, dissolution rate, and bioavailability. The chemical, conditions, and organism involved must be specified before detailed statements can be made about bioavailability and trophic transfer. These topics are addresses in the Draft EIS/OEIS on pages 3.3-8 to 3.3-13.  The following text has been added to section 3.3 of the Final EIS/OEIS: "TNT degrades to a wide variety of products depending on whether the process is physical (e.g., photolysis) or biological (e.g., fungal and bacterial transformation) (ATSDR 1993)."  Regarding the sunlight comment, sunlight is listed as one of many factors responsible for the degradation of TNT in the environment. The text does not state or imply that photolysis would be a major source of TNT degradation. However, if dissolved TNT is present in surface waters, it would be expected to be degraded by sunlight.  The following text has been added to section 3.3 of the Final EIS/OEIS regarding RDX:  "RDX dissolves slowly in water (see Table 3.35) and does not readily adsorb to soils or organic matter. RDX does not accumulate in people or fish and begins to decompose in water after several hours. Physical processes of RDX degradation include hydrolysis and photolysis. However, hydrolysis accounts for less than 12 percent of RDX degradation after 112 days. The half-life of RDX exposed to sunlight is 9 to 13 hours (ATSDR 1995). Microbial degradation of RDX occurs under aerobic and anaerobic conditions. End products include hydrazines, methanol, and methane (ATSDR 1995, Brannon and Pennington 2002)."  The following text has been added regarding the binding agents in plastic explosives (page 3.3-13):  "The degradation and dissolution of these materials may be further slowed by the physical structure and composition of blended explosives, which contain multiple
Suquamish-17	3.6.2 Environmental Consequences  Habitat areas were not mapped (eelgrass beds, geoduck tracts, forage fish spawning areas, etc.). How can impacts be fully assessed if this information is not included?	Eelgrass and kelp beds are shown in Figure 3.6-3 in the Draft and Final EIS/OEIS.  Potential effects to fish and essential fish habitat are presented in section 3.7 Fish.
Suquamish-18	Pelagic Communities The EIS states that pelagic species such as shrimp are abundant and have high rates of reproduction negligible impacts are anticipated. Please discuss	Text has been added to the Final EIS/OEIS regarding the impact of acoustic on species other than whales, seals, etc. See Section 3.6 Marine Plants and Invertebrates.

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	the potential impacts of sonar/acoustics on growth and reproduction. The conclusion that impacts will be negligible is not supported. Brown shrimp have shown an increase in mortality and reduced reproduction as a result of sound exposure. Increases in noise can also result in an increase in metabolic rate and result in a reduction of growth/reproduction	
	(www.awionline.org/oceanslNoise/IO <i>NClDocs/W</i> eilgart_Biodiversity_2008).	
Suquamish-19	3.6.3 Mitigation Measures  What protective measures is the Navy implementing to prevent impacts to resources? The mitigation section specifically states that there are no mitigation measures to protect plants and invertebrates. The marine mammal protection measures do not appear adequate (visual observation?).	The protective measures include standard operating procedures by the Navy in the conduct of all of their training activities. Too numerous to list for every activity, a summary of these makes up Section 3.6.1.5 – Current Requirements and Practices. As mentioned in 3.6.3, because the effects are determined to be minimal, no mitigation measures would be necessary.
	3.10 Birds Please add text that states all of the proposed range expansion areas lie	Text of the Final EIS/OEIS has been changed to clarify that the NWTRC lies within the Pacific Flyway.
Suquamish-20	within an area defined as the Pacific Flyway. The Pacific Flyway is an important migration corridor for a variety of bird species.  Great blue herons are included in the list of birds that utilize the site however there is no text or discussion. Are there any heron rookeries in the vicinity of the range area or proposed range area (was WDFW consulted? They are on the distribution list but was there any follow up)? What about raptor nest sites other than bald eagles (peregrine falcons for example)?	Potential effects to birds are discussed throughout section 3.10; however, effects to individual species have not been identified, other than for species listed under the Endangered Species Act. Blue herons may occur near areas where underwater EOD activities take place. As described in the Draft EIS/OEIS, the area is monitored for wildlife prior to training, and training is delayed if wildlife are present. Impacts to blue herons would be as described for general impacts to birds from this activity.
	5.1.6 Marine Plants and Invertebrates	The proposed action includes no testing of new weapons, but rather the
Suquamish-21	The Navy and the Tribe should look at potential partnering opportunities prior to testing to further investigate the response (or lack of) on marine invertebrates (shrimp and/or crab). There is also no discussion of potential impacts (turbidity, explosives, etc. on larval crab/shrimp/shellfish).	training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed. Because the Navy expects no impacts to marine plants and invertebrates, there would be no purpose to partnering.
Suquamish-22	5.1.7 Fish  Do the fish windows outlined concur with the beach seine data collected around Whidbey Island? In Kitsap County, the WDFW fish window was not accurate.	Analysis of impacts to fish can be found in section 3.10 Fish. Beach seine data was not incorporated into the EIS/OEIS information. The information on presence of species in the project area was obtained from a variety of sources, including the National Marine Fisheries Service and the Washington Department of Fisheries.
	<u>5.1.8 Birds</u>	This survey is a pre-activity visual observation to ensure no seabirds are
Suquamish-23-	Please provide the seabird survey information the Navy will be utilizing. How often? What is the protocol?	in the vicinity of an underwater detonation exercise. This is described in Biological Opinion from the USFWS for EOD Training (USFWS 2008).
Suquamish-24	5.1.9.1 Threatened and Endangered Species  How is this protective of resident killer whales? Lookouts (visual observation) and passive detection does not seem adequate protection in such a large area.	The statement in Section 5.1.9.1 is making the point that no additional measures are necessary specifically for endangered species, since the measures that apply to non-listed species also serves to protect the listed species.  Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.

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		Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
		While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
	5.2.1.5 Alternative Mitigation Measures Considered but Eliminated	The mitigation measured employed by the Navy are based on their
	It is not clear why non-Navy personnel cannot be considered (i.e. someone with marine mammal expertise). They do not have to be on Navy vessels. The expanse is very large and the potential for error is high.	effectiveness in providing a measurable level of additional protection, without unnecessarily inhibiting training. The measures described in the comment are each explained in Section 5.2.1.5 under those criteria. Each
	There was no detailed rationale provided as to why the Navy could not implement seasonal suspension or reduction of sonar and explosive testing during important marine mammal, salmonid or waterfowl migration periods. Especially during times of low or no visibility.	either has no significant protective effect or reduces training effectiveness, or both.
	The Navy is limited to testing within the defined range areas. It is unclear as to why avoidance of "high quality habitat areas cannot be accommodated.	
Suquamish-25	It is not clear why a "ramp up" could not be implemented? Implement the "ramp up" and then everyone can "go hide". That would better clear the area of potential mammals or other sensitive species. Then the activities could commence. Although it may not be effective for dolphins, it would be for Threatened and Endangered resident killer whales. It would also be safer for harbor porpoise, although not listed, they have heightened sensitivity.	
	The Suquamish Tribe welcomes the opportunity to work with the Navy to develop a project that satisfies your goals as well as protects Tribal resources and harvest activities. I look forward to providing additional comments as this project progresses and more information is available, and in helping coordinate a government-to-government meeting between the Navy and the Tribe. If you have questions regarding the comments above please don't hesitate to call 360-394-8447.	
	The Olympic Peninsula Chapter (OPC) of the Surfrider Foundation has discussed the Navy's proposed expansion of the Northwest Training Range Complex and has the following comments.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Surfrider-01	The OPC does not believe that the proposed expansions of the Northwest Training Range Complex is compatible with the goals of the Olympic Coast Sanctuary and believes it threatens the integrity of the marine ecosystem for the entire Range, including human uses. The Chapter recommends that the Navy adopt the No Action Alternative.	
Surfrider-02	Our chapter also submitted comments on the Keyport Range Complex and we find problem with the Navy's piece mealing of expansion projects in the Pacific Northwest. Not only is this confusing to the public, but it neglects	The two actions, although overlapping, involve very different activities, Fleet training on the NWTRC and RDT&E on the NAVSEA NUWC Keyport Range Complex, respectively. The activities at the two range

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	cumulative impacts and also violates the National Environmental Policy Act.	complexes are neither interrelated nor interdependent. The Navy is ensuring NEPA and EO 12114 compliance for both actions. NUWC Keyport activities are evaluated in the cumulative impacts section of the NWTRC EIS/OEIS.
Surfrider-03	Our members are very concerned about the possibility of the Navy activities in the surf-zone causing conflict and injury to public uses and users within the surf zone. We are concerned that the anticipated increase in shipping and aircraft activities could lead to hazardous materials containination, causing	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
	environmental impacts to recreational waters and beaches.	All of the activities described in the proposed action take place typically at least 12 nm from shore. No training involving live explosives occurs within 3 nm of shore.
	In addition, we strongly oppose the use of Navy Sonar, which has documented ill effects on marine life. As stated above, the OPC recommends the No Action Alternative on the Navy's proposed expansion.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine
Surfrider-04	The OPC has also reviewed the comments submitted to the OCMS by the Sanctuary Advisory Council (dated January 30,2009) and agree with the Council's comments regarding probable significant environmental impacts to the environment from the Navy's proposed expansion of the Northwest Training Range Complex.	mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is
	Please feel free to contact me at the following numbers if you have any questions.	little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Thomas -01	I am very against the navy's plans for the Pacific Northwest, starting at the Mendocino County ocean waters from the shore to 250 miles out.  Mendocino County (Fort Bragg, Mendocino ct especially) are fishing communities that a lot of the residents here thrive on for employment. We already have a shortage of Salmon, and some other fish species. Also these plans can endanger the whales and other underwater habitats.	This comment has been duly noted.  The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
	Please accept this letter as my formal comments in response to the United States Navy's Northwest Training Range Complex (NWTRC) Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OIS). I am also attaching the comments from both the Humboldt and Mendocino County Boards of Supervisors.	See responses to specific comments below.
Thompson-01	I support the overall mission of the Navy and its goals of improving the readiness of our forces and their expertise on technically-advanced equipment. On this particular matter, I also appreciate the Navy's responsiveness to my concerns and requests, as well as to those of my constituents. I do, however, have some concerns about the NWTRC proposal and the process by which it was communicated to the larger population; these specific issues are outlined below.	
Thompson-02	First and foremost, I am concerned about the increase in the usage of sonar as proposed in the NWTRC EIS/OIS and its effects on sea life. The First Congressional District of California is home to an already beleaguered commercial fishing industry, and further challenges arising from the increased use of sonar or potentially hazardous debris from exploding ordinances are	NOAA, through the National Marine Fisheries Service (NMFS), is a cooperating agency in the development of this EIS/OEIS. In addition to its cooperative role, NMFS, as a regulator, determines mitigation measures it deems necessary so that NMFS can authorize incidental takes.

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	unjustifiable on any grounds. While the proposal contains references to the available literature regarding how fish and marine mammals may respond to sound and pressure waves, it also notes that such data is available for only 100 of the nearly 29,000 species of fish, and that further research is still needed. Furthermore, National Oceanographic and Atmospheric Administration (NOAA) has only just begun a review of measures to reduce environmental harm from the Navy's use of mid-frequency sonar in training exercises. It is essential that NOAA prescribe measures that substantially reduce impacts on marine wildlife and habitat before the Navy expands its scope of training procedures as proposed in the NWTRC EIS/OIS. Absent the results of NOAA's review, it is difficult to conclude that the Navy has thoroughly examined and allowed for mitigation of these potentially harmful effects in the EIS/OEIS.	
Thompson-03	Second, I am troubled by the lack of public notice to local elected officials representing the communities and counties within and near the NWTRC. While Navy representatives did supply my office with a list of their notification efforts, neither the Del Norte, Humboldt nor Mendocino Boards of Supervisors were included as recipients of the EIS/OIS and Public Hearing Letters. This omission constitutes a major flaw in the scoping process by the Navy during the course of the EIS/OIS for the NWTRC. It blurred the openness, transparency and full disclosure intended by the NEPA process. To achieve full disclosure and notice to the public in the future, I request that any public notices or actions taken regarding the NWTRC be provided to all local government jurisdictions affected by the training, specifically all coastal counties and cities in the First Congressional District of California.  Thank you again for your responsiveness to my requests to appear before the Mendocino Board of Supervisors. I received many reports of your professional and respectful presentation.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, the Navy placed its emphasis on Washington State regarding public hearing locations and notification efforts. Mendocino County is outside of the boundaries of the range complex, but a public hearing was held in Eureka, California.  In addition to notifying the Congressman, several state elected officials and state regulatory agencies were notified. Advertisements were run on five separate days in the <i>Times-Standard</i> , news releases were provided to the <i>North Coast Journal</i> and the <i>Times-Standard</i> , and meeting flyers were posted in 4 separate locations within Humboldt County.
Tillamook-01	The Tillamook County Board of Commissioners wishes to enter its formal comments into the record regarding the Northwest Training Range Complex Draft Environmental Impact Statement.  First, we would like to say we support the Navy's strategic mission to prepare Navy personnel for deployment and homeland defense by providing realistic training environments.  We support the proposed Preferred Alternative 2 with the following additions:  1. Work with the Fisheries Departments in Washington, Oregon and California to coordinate your activities so as not to (as much as possible) overlap with limited offshore fishing seasons.  We agree with the recommendation submitted to the Board of Commissioners by the Fisherman's Advisory Committee to Tillamook (FACT). There is a potential for interference with the fishing fleets in Washington, Oregon and Northern California as they (at times) may be fishing in the same offshore waters as the training occurs in. With very limited	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.

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	fishing seasons (example 12 day halibut season) it is important that coordination occur to prevent interference both ways.	
Tillamook-02	Designate a Navy Liaison to work with various groups in Washington.     Oregon and Northern California as training progresses.  We recommend you include in Alternative 2 the designation of a Navy Liaison to work closely with fishing organizations in the three states to keep them abreast of training times so they can alert their members to avoid the training areas when activity is occurring. In Oregon, OSU Sea Grant can provide you with a list of names and contact information.	The process to establish partner relationships with the Navy is outside the scope of this EIS. For more information, contact Navy Region Northwest (www.cnic.navy.mil/cnrnw/newsroom/index.htm)
Tillamook-03	3. We encourage you to use reasonable means to prevent conflicts with marine mammals, fish, sea turtles and marine invertebrates. In reading your draft plan it appears to us you are taking reasonable precautions to do so but want to make sure you understand both the environmental, political, social and economic consequences of not doing so to our communities.  Last but definitely not least, we wish to thank the US Navy for conducting a public meeting in our community. As you can see by the turnout, our citizens care about what happens off our coastline. We thank you for your service to our citizens. We thank you for your service to protecting our shorelines and we thank you for help in keeping our world a peaceful place to live and raise a family.	The Navy will continue to evaluate the potential impacts of its activities.
Tiles-01	Please do not increase military training activity off our pristine coast. Increased submarine, air, and boat traffic will adversely affect the purity of the air and water and must not be allowed. This is one of the last clean wild coastal areas in California, if not the entire west coast. There is currently a moratorium on commercial fishing in the NWT Range Complex to allow endangered native salmon to recover. War games with harmful mid-range sonar will hinder this recovery effort.  The silence and solitude of the Lost Coast and regions north is precious to the inhabitants and key to local tourism. During these hard economic times we need to nurture these real resources, not create a frightening surreal scenario. Vacationers in search of a wild landscape will not choose to visit our area if the silence was torn through with the roar of military aircraft, or the booms of offshore gun and bomb trainings. Leave us in peace, please.  I must also speak up for the health of the environment. The military is infamous for the persistent pollutants left behind on training grounds, from heavy metals to industrial chemicals to depleted uranium. We do not want to play host to polluters.  I am in favor of Alternative #1, wherein there is NO increased Navy presence in the NWT Range Complex.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Also, the majority of training activities will continue to take place in Washington State or off its coast.
Tracy-01	In these times of unknown future effects of global warming, it is precarious to plan harmful practices which inevitably will increase the amount of pollutants accumulating in the Pacific Ocean.  Some of the scientific evidence already is that the reverse of global warming won't be seen until the year 3000. And that prediction is based upon a	This comment has been duly noted.

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	significant global reduction of CO <sub>2</sub> emissions.	
	Also in the March 11, 2007 article of the SF Chronicle (included), it states that scientists project that "we are truly at the edge of a mass extinction of species". Also stated in the graph is that coastal settlements in almost all parts of the world and especially island populations will be most severely impacted. I believe the peoples' taxes and the Navy's energy and resources would be better spent in planning ways to mitigate the coming real upheaval due to global warming than to train for a phantom war.	
	An article in Mother Jones magazine (Jan/Feb 2008) states that a significant part of California's pollution comes across the Pacific Ocean from China's environmental practices. Similarly, in Essential Health (vol 3 Issue 4) writer Carl Lowe estimates people over 50 are now carry 15 lbs of toxins in their systems.	
	The Navy can not create a plan in isolation of all the scientific data known by other arms of the gov't. All this must be factored in to get a true vision of the impact of such planning on the environment and the people who are affected by changes in air & water quality.	
	Our coastal waters are global resources. It is unacceptable to further degrade the lives of its stakeholders. Coastal residents have everything to lose by the Navy's plan. Contaminants will be absorbed by the marine life on which we and our global markets depend for food.	
	The Pacific Ocean needs to remain pacific and pure. It is not like a giant washtub that drains away all the poison. It is a precious holding tank-holding all our futures in its importance through diversity of its marine biology.	
	I believe our country needs to be concerned more with self destruction from within through ill conceived and shortsighted vision of our role in the biosphere than from the threat of a foreign enemy.	
	This plan is an escalation of the idea that physical conflict is the way to resolve differences. I believe in a higher vision of cooperation and a shared, fair and equal distribution of our resources. Preservation of our mutual resource, the Pacific Ocean is our 1 <sup>st</sup> priority as stewards of the earth. This is the legacy we must leave to our children and posterity. The people of Mendocino say never more to further environmental degradation. We expect the Navy to protect our interests.	
Trembly-01	Extending the use area and frequency of use of high-powered sonar will further degrade the aquatic environment for marine animals such as Grey whales and dolphins. Do not extend the NW Training Range!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Turner-01	Having taught science to middle and high school students, I understand more than the average citizen just how fragile and complicated the oceans' ecosystems are. I am terribly concerned about the expansion of the Navy training activities in the Northwest Training Range Complex because considerable evidence shows that the ocean ecosystems are in Big Trouble.	This comment has been duly noted.
	The U.S. Navy, as a member of the military Defense Dept. is continuing the ancient mindset that war is acceptable. That thinking is SO last century. The earth's biosphere can't tolerate much more adverse human activity. War	

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	making is one of the most environmentally toxic (and crazy) actions we impose on the earth's fragile ecosystems. There is much that we don't know about the complicated ecology, so it seems wise to reduce potentially harmful human activity as much as possible. Downsizing the Navy would be a wonderful step in a better direction.	
Upper Skagit-01	I would like to submit the following comments regarding the EIS for the EOD Program based at NAS Whidbey:  The Tribe, after a preliminary review of the Addendum to U.S. Navy Biological Assessment Explosive Ordinance Disposal Operations for Puget Sound which the Navy previously provided the Tribe during a consultation meeting has made some determinations regarding the EOD Program at NAS Whidbey. First, that there are cumulative adverse effects to the Tribes treaty reserved rights as a direct result of the Navy's EOD training exercises. These adverse effects on the Tribes treaty rights would include; mortality of salmon, bottom fish, forage fish, and Dungeness Crab all of which are important species to the Tribe.  The Tribe has never been provided the opportunity to fully evaluate the effects of the EOD training on its' federally reserved rights by designing and conducting our own up to date comprehensive studies. Some of the studies that are referenced in the Addendum to the Navy Biological Assessment were conducted sixty years ago; (Aplin 1947, Fitch and Young 1948, Anonymous 1948,) and were conducted when they didn't have access to the equipment and scientific methods that meet today's standards. None of these previously conducted studies from 1945 to present has yet to evaluate the EOD effects on Treaty rights. The Upper Skagit Tribe proposed that the Navy fund such a study at a consultation meeting in December 2008 that would evaluate past, current, as well as the cumulative effects of the EOD training program on the Tribe's federally reserved treaty rights.  It should be stated that the Tribe understands the Navy's need for ongoing real training activities at NAS Whidbey and is in full support of the Navy maintaining a "state of readiness" however; the Tribe believes that the adverse effects of the EOD program on the Tribes rights can be fairly mitigated in a manner which is satisfactory to both parties and won't disrupt the Navy's current training regime. To achieve this goal the Tribe is prepared to discu	The Navy has contacted the Upper Skagit Tribe.  Although the Navy's training at Crescent Harbor is included as part of this EIS/OEIS, the document commented upon was not part of this EIS/OEIS. These issues are important to the Navy and were discussed during the Navy's meeting with the Tribe, and will continue to be addressed in future communications with the tribe.
Van Gelder-01	We live in Fort Bragg on the California north coast We oppose the navy extending its training area along our coast.  The Fort Bragg/Mendocino area is a favorite tourist destination. People who visit our area come for the beautiful ocean view, the walks along the seaside bluffs, the fresh air and the quiet. We fear that the sight of Naval vessels on the ocean, the sight and sound of overhead aircraft would destroy the appeal our economy depends on.  Whale-watching is a big draw in this area. Sometimes the whales come so	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships. In addition, Fort Bragg/Mendocino is outside of the NWTRC area.

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	close you can see them swimming, their backs and their big tails emerging as they migrate through. It is a thrill to us to know that the whales are in our waters, swimming confidently to their destinations. We do not want large ships, explosions, or sonar signals disturbing them in their migrations.	
	Fort Bragg is a fishing port and our economy depends also on the success of our local fishing fleet. Any disruption to the natural conditions can affect our fisheries. We believe there is no way you can guarantee that naval operations will not disturb the local marine life.	
	This area is a center of marine biology study by many teachers and students in our colleges and schools. We want to protect this environment from influences that would disturb the delicate ecology.	
	We understand that the Navy proposes to comply with all the federal rules and regulations. But can they guarantee that they will have no impact whatsoever on marine life, noise levels, and visual effects?	
	Those of us who live here love the ocean and the ocean life; we love the unspoiled landscapes, the quiet, and the exquisite views. We love to see the whales and the shore birds, to examine the tide pools, and to watch the sunset from the ocean bluffs.	
	We worry that the training will negatively affect our own lives as well as the economy, the local marine life, and the calm and peacefulness of our coastline.	
	Please do not conduct Naval training off of our coast.	
	[March 8 Letter incorporates February 15 Letter by reference]	Freedom of Information Act requests are handled separately from the
	This letter incorporates by reference and by attachment my February 15, 2009 preliminary comments on this EIS, and my two Freedom of Information Act (FOIA) requests of February 12 and March 1, 2009, asking for materials relied upon by the Navy and crucial to any evaluation of the EIS. The Navy has so far produced not a single one of the clearly defined documents requested, not even reports cited in the EIS itself.	NEPA comment process.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Van Strum-01	Because of the Navy's refusal to provide crucial records relating to the EIS, I request that the comment period be extended at least 60 days beyond the date of such records finally being provided. These comments are therefore preliminary and I reserve the right to submit further comments after the Navy has complied with the Freedom of Information Act.	
	The Navy's refusal to provide crucial documents strongly suggests the Navy's own lack of confidence in its EIS. As shown below, such lack of faith is amply justified; indeed, if this document reflects the Navy's competence in other areas of its job such as navigation, chart or map reading, basic marine research, and anticipating the outcome of naval actions our nation is in deadly peril of defeat through sheer incompetence.	
	The Navy's refusal to provide documents requested under FOIA precludes meaningful comments on this EIS	
	The Navy's refusal to comply with reasonable FOIA requests invalidates this EIS for the following reasons.	

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	My February 12, 2009 FOIA request asked for:  2. Documents identifying the authors, contributors, and contractors who prepared this EIS. It is impossible for the public, our elected representatives, or even the Navy itself to trust the conclusions, factual validity, or integrity of the EIS (particularly given its near-total lack of scientific references as discussed below) without knowing the identity, credentials, academic qualifications and experience of the authors.  3. All communications with governmental and outside agencies, in order to determine what, if any, objective critiques, scientific data, and advice were sought and received by the Navy;  4. Environmental Assessment(s) prepared by the Navy in accordance with Navy regulations 775.4 (d)(3) to prepare an environmental assessment in order to determine whether "preparation of an environmental impact statement is required." Obviously, such an environmental assessment would identify what activities the Navy was conducting and where and when, as well as what impacts were likely to be significant from which activities, none of which information is included in the EIS;  5. Records that would reveal where, how, and why the Navy's multiple, repeated failures of NEPA notification requirements occurred;  6. Records of the budget for this EIS, essential for both the public and our elected representatives to determine how much taxpayer money was wasted on a grossly incompetent EIS.  My March 1, 2009 FOIA request asked for the only two documents cited by the EIS in support of its conclusion of no significant impact on marine life or human health from the Navy's use and disposal of thousands of pounds per year of depleted uranium ordnance in offshore waters:  1. Hanson, W.C. 1974. Ecological Considerations of Depleted Uranium Munitions. Report LA-5559. Los Alamos Scientific Laboratory of the University of California. Los Alamos, NM. (citation Vol 2, p. 8-4 of EIS)  2. Toque, C. 2006. Marine Environmental Depleted Uranium Survey Report – Kirkcudbright Training Area	
Van Strum-02	As noted in my FOIA request, neither of these two studies was ever published in a peer-reviewed journal; whether they were ever published at all, in the sense of being made readily available to the public, is highly questionable. The 1974 Hanson study appears to be an unpublished report for the Atomic Energy Commission and diligent searches of multiple academic, scientific, and government data bases have failed to find it. After I sent my FOIA request, dedicated librarians at the Hatfield Marine Science Laboratory's Guin Library managed to find a copy of the Toque 2006 study, which was done for the British Royal Navy; it is a lengthy report, consisting primarily of boiler-plate language from previous reports, but most importantly it absolutely nowhere supports the Navy EIS claim of no uptake of uranium	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy

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ID	by marine organisms. In fact, what data the report contains utterly contradict Navy claims¹.  ¹ The EIS authors apparently read only the conclusions of the Toque report, "that the survey results show no evidence of DU being present in any marine environmental sample collected in the year 2004." This conclusion is incontrovertibly false. In fact, the report found heavy depleted uranium contamination in soil around land-based gun emplacements, in soil under the trajectory of the ordnance, and to a lesser degree in the sea water, sediments, and organisms of the bay where the ordnance fell - not at all the same situation as ordnance fired from shipboard guns and missiles and aircraft that spew firing residues directly into the water as our Navy does. Furthermore, the study's methodology would not pass muster for even a high school science project. For starters, the entire sampling of marine organisms consisted of a bucket of mussels, .9 kg of shelled scallops, and three lobsters; in a section straight out of Monty Python named "Seafood purchase methodology" the author reports with a straight face that the three lobsters and the scallops were bought in a shop in Kirkcudbright "and boiled within a day of purchase." Even with this amazing sample acquisition, uranium and DU were found, and not even truly creative data contortions support the report's "no evidence of DU" conclusion. For example, all uranium found in the shelled, cooked mussels was attributed by legerdemain to bits of uranium-contaminated sediment or shell that "may have accidentally contaminated" the meat. DU and uranium levels in the store-bought scallops are dismissed with similar semantics. After the very high level of uranium in one of three store-bought lobsters was reduced 81% (applying a completely unreferenced and phenomenally high dry/wet weight ratio) the level was still twice the mean for all of the UK, at which point the author simply concludes that "such a low concentration is not deemed significant" (except, of course, to the person who mi	Properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  The 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	to EIS claims regarding an extremely toxic, extremely persistent compound being released in unrevealed quantities into our waters. The Navy's claim of no significant impact from un-measured depleted uranium releases is therefore without any foundation. For this reason alone the EIS should be withdrawn and started over, with scientifically sound, relevant, peer reviewed, publicly available research supporting any Navy conclusion.	
	The Navy's reliance on nonexistent research invalidates EIS in its entirety	
Van Strum-03	For other metallic poisons discharged into Oregon waters, the EIS authors launch into sheer fiction, supported occasionally by what can only be called the incest school of scientific notation. For example, see text and tables revealing Navy deposits of undisclosed quantities of chromium and chromium compounds into coastal waters at pp. 3.3-7; 3.3-9; 3.3-16; 3.3-17; 3.3-19;	Additional research has been added in the Final EIS/OEIS to the description of the fate of hazardous materials. This new information addresses the concerns brought out in the comment. The conclusions remain the same.

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	3.4-15; and 3.4-24 of Volume 1.	
	The EIS authors acknowledge that chromium compounds along with other metallic poisons will be deposited in the sea as components of "vessels, manned and unmanned aircraft, bombs, shells, missiles, sonobuoys, batteries, electronic components, and as anti-corrosion compounds coating exterior metal surfaces." The authors conclude, with no references whatsoever, that these compounds "will settle to the bottom where they will lodge in deep sediments, eventually be covered by sediment, encrusted by chemical processes (e.g., rust), or covered by marine organisms (e.g., coral)." (EIS p. 3.3-7) In a burst of scientific creativity, the authors further state that "seawater will eventually oxidize the expended training material into benign byproducts;" producing a faux reference not to a scientific paper or even to an unpublished report, but to another U.S. Navy environmental impact statement! (Vol. 2, p. 8-4: "DoN. 2008c. Draft Southern California Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement.)	
	In contrast to the authors' remarkable portrait of benign byproducts, a brief internet search for data on chromium and the chromium compounds listed in the EIS (barium chromate and lead chromate) brings up hundreds of references, to both scientific and regulatory documents, in which the commonest phrases are:	
	"profoundly toxic,"  "a known carcinogen, developmental toxicant, and reproductive toxicant;"  "very persistent in water;"  "high potential for bioconcentration of chromium in aquatic organisms;"  "highly toxic to aquatic organisms and can pose serious risk to humans;"  "highly toxic, corrosive, and carcinogenic;"  "may cause cancer and/or heritable genetic damage;"  "can make fish more susceptible to infection;"  "very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment."	
	Not a single one of the hundreds of references on chromium or chromium compounds includes the word "benign." The U.S. Navy, an extensive search shows, is the only entity to apply the word "benign" to chromium or chromium compounds – and the U.S Navy can cite only the U.S. Navy for its application of the word to so toxic a material. This is creative environmental assessment at its most inventive. Creativity, however, is not a requirement of NEPA. The EIS should be withdrawn and the process started over.	
	The EIS discussion of Unexploded Ordnance is so misleading as to constitute fraudulent concealment	
	EIS authors acknowledge that toxins such as uranium and chromium are not just spewed into air and water by explosions of Naval guns, missiles, and bombs. They blithely note that chromium, chromium compounds, depleted	

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	uranium, and other hazardous metals and compounds are also released into the ocean when artillery shells, grenades, high explosives, rockets, and submunitions <sup>2</sup> fail to explode and sink to the bottom. Table 3.3-3 on p. 3.3-8 shows that nearly 5 percent of all military ordnance fails to explode.	
	<sup>2</sup> Any munition that, to perform its task, separates from a parent munition.	
	Dictionary of Military and Associated Terms. US Department of Defence 2005.	
Van Strum-04	"Under the No Action Alternative," the authors announce, "a total of 25,856 naval gunshells would be expended over an ocean area of approximately 122,400 nm²." Astonishingly, as emphasized in my February 15 preliminary comments, the EIS absolutely nowhere says whether those figures are per day, per month, per year, or for how many years past. Assuming for the sake of the authors' immortal souls that the figures are per year, that would mean some 1,292.8 pieces of unexploded ordnance sinking to the ocean floor every year for an undisclosed number of years. From each of these, according to the EIS, would leach every year undisclosed quantities of barium chromate, potassium perchlorate, phosphorus, titanium compounds, depleted uranium, lead oxide, lead chromate, ammonium perchlorate, fulminate of mercury, and lead azide.  That these are hazardous materials the authors fleetingly note, but then conclude, yet again with absolutely no references whatever: "However, the hazardous constituents decompose slowly, so existing ocean and tidal currents would dissipate these materials to undetectable levels."  Obviously, the EIS authors never troubled to do even a minimal search, which would have brought up numerous articles on highly toxic carcinogenic compounds leaching from unexploded ordnance in sea water, and uptake by marine organisms of such toxins. Some of this research was even done by, for, or in spite of the U.S. Navy in waters off of Vieques, which had been pounded by Navy "training" and "testing" exercises for decades. The EIS nowhere even mentions worldwide concern over the extreme and growing hazard of unexploded ordnance in aquatic environments, as evidenced by international scientific meetings convened specifically to address this issue. See, e.g., "Cancer-causing Toxins Linked to Unexploded Munitions," Science Daily, February 18, 2009; also see U.S. Congressman Earl Blumenauer's UXO (unexploded ordnance) Caucus.  The EIS authors' omission of critical information on where and for how long its No Action Alter	The text and associated tables have been revised to reflect that all expenditures are annual.  Most of the expended materials that would remain in the ocean are non-explosive. Of those that include explosives, only those that malfunction (a maximum of approximately 10%) would be considered unexploded ordnance. Therefore, a maximum of approximately 100 rounds of unexploded ordnance per year would sink to the ocean floor.
	impacts on marine ecoystems and the humans who depend on them. Indeed, the total failure to address this issue strongly suggests an EIS written to support a pre-ordained proposal, assiduously leaving out inconvenient facts that contradict pre-ordained conclusions. The EIS should therefore be withdrawn and the NEPA process begun again honestly, with competent authors.	
Van Strum-05	EIS failure to address synergism compounds ignorance of pre-	The training activities analyzed in the EIS/OEIS include actions that

## ID **Response Text Issue Text** generate expended materials (shell casings, sonobuoys, mobile targets) existing condition of environment that are not retrieved after use. These objects have been used for their While the EIS authors acknowledge the phenomenon of synergism, they intended purpose, generally in areas greater than 50 nm from shore and apparently labor under the delusion that the word applies only to sonar. in waters 6,000 feet (1,000 fathoms) deep or more. The Navy does not Should they actually read the wealth of research on the numerous toxins the "dump" materials into waters of the U.S. In addition, none of the current or Navy dumps with abandon into coastal waters, they would see many proposed activities take place in or near the mouths of rivers. The EIS references to synergistic effects among different compounds. Lest the (Section 3.4 Water Resources) acknowledges that contaminants, authors have forgotten or never knew, synergism occurs when the effects of including metals, synthetic organic compounds, pesticides, and two or more chemicals combined are greater than and/or different from the pathogens, are present in the marine waters of the Pacific Northwest. sum of their effects separately. Many of the uncited references for chromium However, the presence of these materials is unrelated to naval activities. and chromium compounds, for example, emphasize that their extremely toxic Analyses of the components released from explosives and other effects are susceptible to synergism with other elements and conditions. expended materials can be found in section 3.3 Hazardous Materials. A particularly in aquatic systems. The EIS failure to address synergism among full description of the compounds is included, along with their fate and the pollutants it produces further invalidates its stunning array of unfounded transport, acknowledgement of data gaps, and areas where effects are conclusions. not clearly known. Section 3.4 Water Resources, includes detailed The failure to address synergism is further compounded by the total failure to discussions of how these components interact with seawater and address the already compromised aquatic environment of coastal Pacific sediment (when known) and the concentrations at which components are waters, or how all of the Navy's supposed alternatives would exacerbate known to have ill effects. None of the proposed actions would result in such pre-existing conditions. A brief search shows that numerous exceedances of EPA water quality criteria. government reports and scientific studies have raised serious concerns about the levels of pollutants being flushed into the ocean by Pacific river systems. The Columbia River, for example, carries toxic loads of dioxins, PCBs, pesticides, radionucleides, heavy metals and other toxins into the ocean (see, e.g., "Columbia River toxins moving up food chain," by Craig Welch, Seattle Times, July 10, 2008), where currents and winds carry them to our beaches and coastal waters both north and south of the river mouth. (see, e.g., Paul D. Komar, The Pacific Northwest Coast: Living with the Shores of Oregon and Washington, 1997) Other studies have periodically found similar contaminants in other coastal rivers. The EIS failure to address the existence of these well-known pollutants thus omits mention of any synergistic or additive effects of mixing them with the Navy's toxic effluvia, or of how Naval explosions will stir up poisons such as dioxins, PCBs, and heavy metals lodged in sediments and disperse them into the marine environment. The Navy authors' apparent assumption that Navy activities occur in a pristine, untouched environment is a dangerous and extremely foolish fiction, compounded by the equally dangerous and foolish assumption that synergism does not occur among Navy pollutants and pre-existing poisons. Fiction and false assumptions have no place in environmental impact statements. Conclusion The above comments are but the tip of the iceberg, as there has not been time to critique the EIS's lengthy discussions of sonar impacts and explosion damage to marine organisms; a brief skim of those sections, however, indicates that they were prepared with the same cavalier indifference to scientific validation as the sections I have discussed above. The EIS's gross omissions, false references, nonexistent references, and

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	blatant, repeated assumptions based on no references at all render the document entirely invalid, both scientifically and legally. The EIS should therefore be withdrawn and the entire proposal re-examined and begun from scratch, with qualified personnel clearly identified and the public adequately informed and involved from the start.	
	The Navy's conduct in both the preparation and the public notification for this EIS has been extremely disillusioning, as it violates not just federal law but the Navy's own proud tradition of integrity and concern for its own people and for the public it serves.	
Van Strum-06	[pdf is located above at Hogg/Van Strum] Enclosed are comments on the NWTRC EIS from Susan Hogg and Carol Van Strum. Due to the failures and crashes endemic to the Navy website and the unreliability of its email function, we are forced to submit our comments by hard copy via FedEx at considerable expense. This is but another unidentified impact and expense of the Navy's EIS.  This letter presents my preliminary comments on the draft U.S. Navy Northwest Training Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement, volumes 1 & 2,	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. Also, public review was not limited at any time during the comment period because comments could be submitted by mail at any time.
Van Strum-07	I consider these to be preliminary comments because I was unaware of the EIS or the Navy's proposed actions until two weeks ago, when I learned via word of mouth of the public meeting held January 30, 2009, too late to be able to attend, particularly as the meeting was held some 45 miles from my home.  Due to the Navy's gross failure to inform the public, Oregon's Congressional delegation has asked the comment period on the EIS to be extended to April 11, 2009, but as there is so far no response to the congressional request, I prepare these comments after only a cursory review of the EIS. The Navy EIS fails to meet the requirements of the National Environmental Policy Act (NEPA) in at least five major respects, anyone of which warrants withdrawal of the entire EIS and cancellation of the actions proposed therein. The five major failures identified so far are:	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Van Strum-08	Pailure to identify past, current and future activities in the waters off Oregon and northern California, which comprise most of the area involved in the EIS;	The past, current and future activities within the entire Northwest Training Range Complex were described in the Draft EIS/OEIS in Chapter 2 – Description of Proposed Action and Alternatives, and Chapter 4 – Cumulative Impacts.
Van Strum-09	Total failure to support a finding of no significant impact for Oregon and northern California waters;	The analysis and justification for the conclusions run throughout the Draft EIS/OEIS Chapter 3 – Affected Environment and Environmental Consequences.
Van Strum-10	Repeated assumptions of no impact based on absence of data, and repeated findings of no significant impact unsupported by either data or references;	See response to similar comment above.
Van Strum-11	4) Blatant failure to examine obvious and feasible alternatives such as	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in

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	reducing or eliminating all testing and training actions in the area; and	levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Van Strum-12	5) Monumental failure to notify the public or concerned parties from the outset, precluding meaningful review and comment at any stage of EIS development.	See response to Van Strum-07.
Van Strum-13	1) Because the EIS purports to discuss environmental impacts of Navy activities in an area encompassing the entire Oregon coastline, territorial waters, and beyond, its failure to identify those activities precludes meaningful comment and invalidates all conclusions of no significant impact, rendering the entire document invalid.	The Navy disagrees that its conclusions are invalid due to the nature in which activities' locations are described. In Chapter 2 of the Draft EIS/OEIS, the Navy has described, in as much detail as possible, where training would take place. Due to the dynamic environment in which the Navy trains in the NWTRC, the Navy cannot predict precisely where, within the range complex, that training will take place.
Van Strum-14	A "no action" alternative should, as the name implies, mean no action. In Navy parlance, however, the Navy's deceptively named "No Action" alternative reveals that "no action" actually means to continue activities which the Navy claims to be already conducting off the Oregon coast; however, the EIS nowhere identifies what those current activities are, where they are occurring, for how long they have occurred, or what environmental impacts of those activities have already accrued; furthermore, the EIS nowhere identifies any previous environmental assessment or environmental impact statement describing/identifying these current and past activities or discussing their environmental impacts.  The question of past and current Naval activities is highly significant. For example, the EIS acknowledges that past and present activities off the Oregon coast have involved the use of rounds comprised of depleted uranium. Uranium, depleted or otherwise, is an exceptionally persistent material in the environment. The EIS revelations of Navy use of depleted uranium thus raise very serious concerns about how long the Navy has been using depleted uranium rounds in the Pacific Ocean, how much was used per year, where that use has occurred, and what environmental impacts have already accrued from such use, such as uptake by fish and synergistic effects with other wastes and products from Naval exercises. The EIS mentions none of these issues.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).  The No Action Alternative, as described in Chapter 2 of the Draft EIS/OEIS identifies the past and current activities in the NWTRC.
Van Strum-15	As current activities off the Oregon coast are not covered in this or any environmental impact statement or assessment, such activities are therefore unlawful and the Navy should immediately desist from all activities of any kind in waters from the Oregon coast to the 250-mile limit until such time as valid environmental documents, addressing all current and past activities and their effects, have been prepared and adequately made public to the people of Oregon.	This EIS marks the first time the Navy has taken a range complex approach at complying with NEPA on the NWTRC. Previously, NEPA requirements were met by conducting environmental analyses on individual platforms and weapons systems.  The Navy believes this range complex approach will provide a more accurate analysis of the impacts of Navy training.
Van Strum-16	2) The EIS states that its proposed action "may have coastal effects" in the state of Washington, but that "For the States of Oregon and California, the Navy has determined that its Proposed Action will have no coastal effects." (The coastal zone extends 3 nautical miles seaward from the shoreline.) The EIS absolutely <i>nowhere</i> describes either what the proposed action is or will	The Navy is in compliance with the Coastal Zone Management Act and has submitted consistency determinations to the States of Washington, Oregon, and California.

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	be in Oregon and California coastal waters, or what the effects of the unnamed proposed action will be in those waters. For example, see Table 4-2, pp. 4-3 to 4-7, "Past, Present and Planned Future Projects in the Offshore Area," which does not include a single project identified for Oregon or northern California. For further example, the word "Oregon" occurs on some 106 pages in Vol. I of the EIS, and on 23 pages of Vol. II; on at most only <i>five</i> (5) of those pages does the phrase "no significant impact" also occur, and on <i>none</i> of these five pages are any specific actions or locations mentioned. The Navy EIS determination that the Proposed Action will have no coastal effects in Oregon and California is therefore arbitrary, capricious, and entirely unsupported by any evidence whatsoever. The entire EIS should be withdrawn for that reason alone.	
Van Strum-17	3) Throughout the entire EIS, the Navy exhibits a blatant don't look, don't tell policy toward environmental effects, using an absence of data to justify an assumption that no effects occur. For example, see p. 3.6-15, "The study area for consideration of impacts on marine plants and invertebrates includes the open ocean west of Washington, Oregon, and northern CaliforniaAircraft overflight and training activities are assumed to have no impacts to marine communities, because impacts of sound on plants and invertebrates are unknown and difficult to quantify." Similarly, the EIS repeatedly states a finding of no significant impact totally unsupported by data or even references, e.g., Tables ES-3 Summary of Effects - Geology and Soils; and ES-4 Summary of Effects - Air Quality, which typically conclude, with no data, first that the impacts would be the same as Alternative 1 (for which no specific activities, locations, or impacts were described for Oregon or California), and second, that no significant impacts would therefore occur.	The Final EIS/OEIS has been revised to include a discussion of invertebrate hearing, and sound impacts to invertebrates.
Van Strum-18	4) The EIS fails to examine or consider such obvious and feasible alternatives as reducing or eliminating all training and testing activities in the ocean and territorial waters off Oregon and northern California; or conducting such exercises in other areas of the ocean, such as islands being submerged by rising waters due to global warming, or areas infested by pirates that would provide excellent practice for Naval anti-piracy activities.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.  Similarly, Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Van Strum – 19	5) From the outset, the monumental failure of the Navy to notify the public or concerned parties of its proposed actions totally precluded meaningful public participation, review, and comment. The Navy's sole public notice of the 2007 notice of intent/scoping phase of this EIS was placed in a single Oregon newspaper, the <i>News Guard</i> , a small weekly in the coastal town of Lincoln City read by very few people outside the immediate vicinity of Lincoln City, thus depriving most of the state and entire coast of any notice whatsoever. According to the EIS, notice of publication of the current draft EIS was placed in the same paper in December, 2008, announcing a public meeting January 30 in South Beach (not Depoe Bay, as the EIS states). However, the editor of the <i>News Guard</i> emphatically reported that the paper received no such notice whatsoever and knew nothing of the public meeting until after it occurred.	Please see response to Van Strum-07.

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	Although the Navy placed small, almost invisible, unreadable ads in a Newport newspaper prior to the meeting*, every person who attended - including the Newport paper's reporter stated that they learned of it only through word of mouth. Thus a meeting and publication of vital importance to the entire state and especially its 362mile coastline, was to all intents and purposes a well-kept secret, regardless of Navy protestations to the contrary. The EIS and the proposals the Navy has devised should therefore be withdrawn and the entire process started over from scoping notice on.	
	For the above reasons, I advise the U.S. Navy to withdraw its EIS and correct the grave shortcomings of both its content and the process of public notice identified above before bringing its proposals forward again.	
	* Note also that online versions of said papers (in which Navy had placed ads of open house/hearing) do not carry all of the advertising present in the hard copy. Therefore, notice was even more limited than expected, because it was limited to readers who had access to a hard copy of the paper, thus reducing notice to a much smaller potential population than might otherwise be expected in these www days. The Navy's failure to even investigate this possibility, let alone compensate for it by utilizing the many other easily available & inexpensive methods of providing adequate public notice of the issuance of the scoping process & EIS, provides additional support for an immediate finding of failure to comply with NEPA & the Navy's own regulations implementing NEPA and the conclusion that the EIS should be withdrawn & the scoping process restarted. This time with appropriate compliance with NEPA.	
	This is a request for documents pursuant to the Freedom of Information Act. I request that copies of the following documents, or documents containing the following information be provided to me:	Freedom of Information Act requests are handled separately from the NEPA comment process.
	List of actual authors/preparers of the Northwest Training Range Complex Draft Environmental Impact Statement/Overseas Environmental Impact Statement (henceforth, "DEIS/OEIS");	
	2. All communications with any and all contractors hired to prepare, and/or review, and/or consult on the DEIS/OEIS;	
Van Strum – 20	3. All intra- and inter- agency communications, related to the DEIS/OEIS, whose release is not prohibited by law, and for all communications with parties outside the agency.  4. Any and all Environmental Assessments concerning the activities covered in the DEIS/OEIS;	
	Decision documents related to decision(s) not to prepare an Environmental Assessment on activities covered in the DEIS/OEIS;	
	6. Records/documents/communications related to plan(s) to ensure appropriate communication with interested parties, and identifying which commands were responsible for ensuring public participation pursuant to 32 CFR § 775.11;	
	7. Records relating to decisions on locations, dates, and times of public meetings regarding the DEIS/OEIS;	

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	8. Records relating to decisions on methods of providing notice of publication of DEIS/OEIS to interested parties and the public;	
	9. Records relating to decisions on choice of medium (CD, hard copy, web site or other) and location/recipient of the DEIS/OEIS for public review;	
	10. Records of the budget and actual itemized accounting of expenditures for this DEIS/OEIS, including, but not limited to, the scoping process, public notification process, printing, including public relations material, and all contractor fees.	
	In order to determine my status for purposes of determining applicability of any fees, I am a representative of the news media affiliated with Planet Waves, Daily Kos, and other on-line news outlets and this request is made as part of news gathering and not for commercial use, and this request is made for the express purpose of informing the public.	
	I request a waiver of all fees/costs for this request. Disclosure of the requested information to me is in the public interest because it is likely to contribute significantly to public understanding of the operations and activities of the government and is not in my commercial interest. I will be disseminating this information for the public benefit via the above-named websites, and via public interest groups such as Oregon Shores Conservation Coalition, Greenpeace, Audubon Society, and NRDC.	
	I ask that my request receive expedited processing because the comment period for the DEIS/OEIS ends on February 18, 2009, unless the Secretary of the Navy grants the Congressional delegation's request for an extension. The information requested is essential for preparing meaningful comments on both the DEIS/OEIS contents and the adequacy of the notice provided by the Navy.	
	This is a request for documents pursuant to the Freedom of Information Act. I request that copies of the following studies cited in the NWTRC DEIS/OEIS be provided to me:	Freedom of Information Act requests are handled separately from the NEPA comment process.
	Hanson, W.C. 1974. Ecological Considerations of Depleted Uranium Munitions. Report LA-5559. Los Alamos Scientific Laboratory of the University of California. Los Alamos, NM. (citation Vol 2, p. 8-4 of EIS)	
Van Strum – 21	Toque, C. 2006. Marine Environmental Depleted Uranium Survey Report – Kirkcudbright Training Area – 2—4. Environmental Sciences Department, Institute of Naval Medicine. Gosport, UK. (citation Vol. 2, p. 8-5 of EIS).	
	The above two studies are the <i>only</i> references cited in the EIS to support its conclusion of no significant impact on marine ecosystems, marine organisms, or human health from the Navy's use and disposal of thousands of pounds per year of depleted uranium ordnance in our offshore waters.	
	A long and futile search of the scientific literature, both on-line and through library services, has revealed that neither of the above references was ever published in any peer-reviewed scientific publication. As it is impossible to determine the validity of the EIS claim of no significant impact	

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	without reviewing its sources, I ask that the comment period be extended at least 30 days beyond my receipt of the above studies in order to allow qualified scientific reviewers to evaluate the studies and determine whether they support the EIS claims regarding depleted uranium safety.	
	In order to determine my status for purposes of determining applicability of any fees, I am a representative of the news media affiliated with Planet Waves, Daily Kos, and other on-line news outlets and this request is made as part of news gathering and not for commercial use, and this request is made for the express purpose of informing the public.	
	I request a waiver of all fees/costs for this request. Disclosure of the requested information to me is in the public interest because it is likely to contribute significantly to public understanding of the operations and activities of the government and is not in my commercial interest. I will be disseminating this information for the public benefit via the above-named websites, and via public interest groups such as Oregon Shores Conservation Coalition, Greenpeace, Audubon Society, and NRDC, as well as veterans' groups concerned about exposure to depleted uranium.	
	I ask that my request receive expedited processing because the comment period for the DEIS/OEIS is currently scheduled to end on March 11, 2009, unless an extension is granted to allow scientific and public scrutiny of the Navy's only two references on a subject of extreme public and scientific interest. The information requested is essential for preparing meaningful comments on the DEIS/OEIS assumptions regarding a seriously toxic compound.	
	In asking for expedited processing, I remind the Navy that I have still received none of the materials requested in my February 12, 2009 Freedom of Information Act request, which was also for information essential for preparing meaningful comments on the EIS. I sincerely hope the Navy does not treat the current request with similar indifference.	
	[March 8 Letter] This letter incorporates by reference and by attachment my February 15, 2009 preliminary comments on this EIS, and my two Freedom of Information Act (FOIA) requests of February 12 and March 1, 2009, asking for materials relied upon by the Navy and crucial to any evaluation of the EIS. The Navy has so far produced not a single one of the clearly defined documents requested, not even reports cited in the EIS itself.	Freedom of Information Act requests are handled separately from the NEPA comment process.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Van Strum-22	Because of the Navy's refusal to provide crucial records relating to the EIS, I request that the comment period be extended at least 60 days beyond the date of such records finally being provided. These comments are therefore preliminary and I reserve the right to submit further comments after the Navy has complied with the Freedom of Information Act.	
	The Navy's refusal to provide crucial documents strongly suggests the Navy's own lack of confidence in its EIS. As shown below, such lack of faith is amply justified; indeed, if this document reflects the Navy's competence in other areas of its job such as navigation, chart or map reading, basic marine research, and anticipating the outcome of naval actions our nation is in	

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	deadly peril of defeat through sheer incompetence.	
	The Navy's refusal to provide documents requested under FOIA precludes meaningful comments on this EIS.	
	The Navy's refusal to comply with reasonable FOIA requests invalidates this EIS for the following reasons.	
	My February 12, 2009 FOIA request asked for:	
	1. Documents identifying the authors, contributors, and contractors who prepared this EIS. It is impossible for the public, our elected representatives, or even the Navy itself to trust the conclusions, factual validity, or integrity of the EIS (particularly given its near-total lack of scientific references as discussed below) without knowing the identity, credentials, academic qualifications and experience of the authors.	
	2. All communications with governmental and outside agencies, in order to determine what, if any, objective critiques, scientific data, and advice were sought and received by the Navy;	
	3. Environmental Assessment(s) prepared by the Navy in accordance with Navy regulations 775.4 (d)(3) to prepare an environmental assessment in order to determine whether "preparation of an environmental impact statement is required." Obviously, such an environmental assessment would identify what activities the Navy was conducting and where and when, as well as what impacts were likely to be significant from which activities, none of which information is included in the EIS;	
	4. Records that would reveal where, how, and why the Navy's multiple, repeated failures of NEPA notification requirements occurred;	
	5. Records of the budget for this EIS, essential for both the public and our elected representatives to determine how much taxpayer money was wasted on a grossly incompetent EIS.	
	My March 1, 2009 FOIA request asked for the only two documents cited by the EIS in support of its conclusion of no significant impact on marine life or human health from the Navy's use and disposal of thousands of pounds per year of depleted uranium ordnance in offshore waters:	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not
	1. Hanson, W.e. 1974. Ecological Considerations of Depleted Uranium Munitions. Report LA-5559. Los Alamos Scientific Laboratory of the University of California. Los Alamos, NM.	created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the
) / · · · · · · · · · · · · · · · · · ·	(citation Vol 2, p. 8-4ofEIS)	Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions
Van Strum-23	2. Toque, C. 2006. Marine Environmental Depleted Uranium Survey Report – Kirkcudbright Training Area - 2-4. Environmental Sciences Department, Institute of Naval Medicine. Gosport, UK. (citation Vol. 2, p. 8-5 of EIS).	will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural
	As noted in my FOIA request, neither of these two studies was ever published in a peer-reviewed journal; whether they were ever published at all, in the sense of being made readily available to the public, is highly questionable. The 1974 Hanson study appears to be an unpublished report for the Atomic Energy Commission and diligent searches of multiple academic, scientific, and government data bases have failed to find it. After I	uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that

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ID	sent my FOIA request, dedicated librarians at the Hatfield Marine Science Laboratory's Guin library managed to find a copy of the Toque 2006 study, which was done for the British Royal Navy; it is a lengthy report, consisting primarily of boiler-plate language from previous reports, but most importantly it absolutely nowhere supports the Navy EIS claim of no uptake of uranium by marine organisms. In fact, what data the report contains utterly contradict Navy claims¹.  Thus, the Navy relies solely on two unpublished, non-peer-reviewed reports, one of which is unavailable and the other totally irrelevant and contradictory to EIS claims regarding an extremely toxic, extremely persistent compound being released in unrevealed quantities into our waters. The Navy's claim of no significant impact from un-measured depleted uranium releases is therefore without any foundation. For this reason alone the EIS should be withdrawn and started over, with scientifically sound, relevant, peer reviewed, publicly available research supporting any Navy conclusion.  ¹The Toque study found heavy depleted uranium contamination in soil around land-based gun emplacements, in soil under the trajectory of the ordnance, and to a lesser degree in the sea water, sediments, and organisms of the bay where the ordnance fell - not at all the same situation as ordnance fired from shipboard guns and missiles and aircraft that spew firing residues directly into the water; furthermore, the study's methodology would not pass muster for even a high school science project. For example, the entire sampling of marine organisms consisted of a bucket of mussels and three lobsters; all uranium found in the shelled, cooked mussels was attributed by legerdemain to bits of shell that might have remained in the meat; and the high level of uranium in one of three lobsters was below an arbitrary level of concern (except, of course, concern to the person who might eat that third lobster, but neither the Royal Navy nor our own apparently have any level of concern	uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  The 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Van Strum-24	The Navy's reliance on nonexistent research invalidates EIS in its entirety  For other metallic poisons discharged into Oregon waters, the EIS authors launch into sheer fiction, supported occasionally by what can only be called the incest school of scientific notation. For example, see text and tables revealing Navy deposits of undisclosed quantities of chromium and chromium compounds into coastal waters at pp. 3.3-7; 3.3-9; 3.3-16; 3.3-17; 3.3-19; 3.4-15; and 3.4-24 of Volume 1.  The EIS authors acknowledge that chromium compounds along with other metallic poisons will be deposited in the sea as components of "vessels, manned and unmanned aircraft, bombs, shells, missiles, sonobuoys, batteries, electronic components, and as anti-corrosion compounds coating exterior metal surfaces." The authors conclude, with no references whatsoever, that these compounds "will settle to the bottom where they will lodge in deep sediments, eventually be covered by sediment, encrusted by chemical processes (e.g., rust), or covered by marine organisms (e.g.,	Additional research has been added in the Final EIS/OEIS to the description of the fate of hazardous materials. This new information addresses the concerns brought out in the comment. The conclusions remain the same.

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	coral)." (EIS p. 3.3-7) In a burst of scientific creativity, the authors further state that "seawater will eventually oxidize the expended training material into benign byproducts;" producing a faux reference not to a scientific paper or even to an unpublished report, but to another U.S. Navy environmental impact statement! (Vol. 2, p. 8-4: "DoN. 2008c. Draft Southern California Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement.)  In contrast to the authors' remarkable portrait of benign byproducts, a brief internet search for data on chromium and the chromium compounds listed in the EIS (barium chromate and lead chromate) brings up hundreds of references, to both scientific and regulatory documents, in which the commonest phrases are:	
	"profoundly toxic,"  "a known carcinogen, developmental toxicant, and reproductive toxicant;"  "very persistent in water;"  "high potential for bioconcentration of chromium in aquatic organisms;"  "highly toxic to aquatic organisms and can pose serious risk to humans;"  "highly toxic, corrosive, and carcinogenic;"  "may cause cancer and/or heritable genetic damage;"  "can make fish more susceptible to infection;"  "very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment."  Not a single one of the hundreds of references on chromium or chromium compounds includes the word "benign." The U.S. Navy, an extensive search shows, is the only entity to apply the word "benign" to chromium or chromium compounds - and the U.S Navy can cite only the U.S. Navy for its application of the word to so toxic a material. This is creative environmental assessment at its most inventive. Creativity, however, is not a requirement of NEPA. The EIS should be withdrawn and the process started over.	
	The EIS discussion of Unexploded Ordnance is so misleading as to constitute fraudulent concealment  EIS authors acknowledge that toxins such as uranium and chromium are not just spewed into air and water by explosions of Naval guns, missiles, and bombs. They blithely note that chromium, chromium compounds, depleted uranium, and other hazardous metals and compounds are also released into the ocean when artillery shells, grenades, high explosives, rockets, and submunitions² fail to explode and sink to the bottom. Table 3.3-3 on p. 3.3-8 shows that nearly 5 percent of all military ordnance fails to explode.	
Van Strum-25	"Under the No Action Alternative," the authors announce, "a total of 25,856 naval gunshells would be expended over an ocean area of approximately 122,400 nm2." Astonishingly, as emphasized in my February 15 preliminary comments, the EIS absolutely nowhere says whether those figures are per day, per month, per year, or for how many years past. Assuming for the sake of the authors' immortal souls that the figures are per year, that would mean some 1,292.8 pieces of unexploded ordnance sinking to the ocean floor every year for an undisclosed number of years. From each of these,	The text and associated tables have been revised to reflect that all expenditures are annual.  Most of the expended materials that would remain in the ocean are non-explosive. Of those that include explosives, only those that malfunction (a maximum of approximately 10%) would be considered unexploded ordnance. Therefore, a maximum of approximately 100 rounds of unexploded ordnance per year would sink to the ocean floor.

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	according to the EIS, would leach every year undisclosed quantities of barium chromate, potassium perchlorate, phosphorus, titanium compounds, depleted uranium, lead oxide, lead chromate, ammonium perchlorate, fulminate of mercury, and lead azide.	
	That these are hazardous materials the authors fleetingly note, but then conclude, yet again with absolutely no references whatever: "However, the hazardous constituents decompose slowly, so existing ocean and tidal currents would dissipate these materials to undetectable levels." Obviously, the EIS authors never troubled to do even a minimal search, which would have brought up numerous articles on highly toxic carcinogenic compounds leaching from unexploded ordnance in sea water, and uptake by marine organisms of such toxins. Some of this research was even done by, for, or in spite of the U.S. Navy in waters off of Vieques, which had been pounded by Navy "training" and "testing" exercises for decades. The EIS nowhere even mentions worldwide concern over the extreme and growing hazard of unexploded ordnance in aquatic environments, as evidenced by international scientific meetings convened specifically to address this issue. See, e.g., "Cancer-causing Toxins Linked to Unexploded Munitions," Science Daily, February 18, 2009; also see U.S. Congressman Earl Blumenauer's UXO (unexploded ordnance) Caucus.  The EIS authors' omission of critical information on where and for how long its No Action Alternative actions have been depositing incredibly toxic materials into our ocean amounts to fraudulent concealment of hazards which the Navy knows or should have known could have serious, significant impacts on marine ecoystems and the humans who depend on them. Indeed, the total failure to address this issue strongly suggests an EIS written to support a pre-ordained proposal, assiduously leaving out inconvenient facts	
	that contradict pre-ordained conclusions. The EIS should therefore be withdrawn and the NEPA process begun again honestly, with competent authors.	
	<sup>2</sup> Any munition that, to perform its task, separates from a parent munition. Dictionary of Military and Associated Terms. US Department of Defense 2005.	
	EIS failure to address synergism compounds ignorance of preexisting condition of environment	The training activities analyzed in the EIS/OEIS include actions that generate expended materials (shell casings, sonobuoys, mobile targets)
Van Strum-26	While the EIS authors acknowledge the phenomenon of synergism, they apparently labor under the delusion that the word applies only to sonar. Should they actually read the wealth of research on the numerous toxins the Navy dumps with abandon into coastal waters, they would see many references to synergistic effects among different compounds. Lest the authors have forgotten or never knew, <i>synergism</i> occurs when the effects of two or more chemicals combined are greater than and/or different from the sum of their effects separately. Many of the uncited references for chromium and chromium compounds, for example, emphasize that their extremely toxic effects are susceptible to synergism with other elements and conditions,	that are not retrieved after use. These objects have been used for their intended purpose, generally in areas greater than 50 nm from shore and in waters 6,000 feet (1,000 fathoms) deep or more. The Navy does not "dump" materials into waters of the U.S. In addition, none of the current or proposed activities take place in or near the mouths of rivers. The EIS (Section 3.4 Water Resources) acknowledges that contaminants, including metals, synthetic organic compounds, pesticides, and pathogens, are present in the marine waters of the Pacific Northwest. However, the presence of these materials is unrelated to naval activities. Analyses of the components released from explosives and other
Van Strum-26	Should they actually read the wealth of research on the numerous toxins the Navy dumps with abandon into coastal waters, they would see many references to synergistic effects among different compounds. Lest the authors have forgotten or never knew, <i>synergism</i> occurs when the effects of two or more chemicals combined are greater than and/or different from the sum of their effects separately. Many of the uncited references for chromium and chromium compounds, for example, emphasize that their extremely toxic	"dump" materials into waters of the U.S. In ac proposed activities take place in or near the r (Section 3.4 Water Resources) acknowledge including metals, synthetic organic compound pathogens, are present in the marine waters However, the presence of these materials is

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ID	the pollutants it produces further invalidates its stunning array of unfounded conclusions.  The failure to address synergism is further compounded by the total failure to address the already compromised aquatic environment of coastal Pacific waters, or how <i>all</i> of the Navy's supposed alternatives would exacerbate such pre-existing conditions. A brief search shows that numerous government reports and scientific studies have raised serious concerns about the levels of pollutants being flushed into the ocean by Pacific river systems. The Columbia River, for example, carries toxic loads of dioxins, PCBs, pesticides, radionucleides, heavy metals and other toxins into the ocean (see, e.g., "Columbia River toxins moving up food chain," by Craig Welch, Seattle Times, July 10, 2008), where currents and winds carry them to our beaches and coastal waters both north and south of the river mouth. (see, e.g., Paul D. Komar, <i>The Pacific Northwest Coast: Living with the Shores of Oregon and Washington</i> , 1997) Other studies have periodically found similar contaminants in other coastal rivers. The EIS failure to address the existence of these well-known pollutants thus omits mention of any synergistic or	Response Text  full description of the compounds is included, along with their fate and transport, acknowledgement of data gaps, and areas where effects are not clearly known. Section 3.4 Water Resources, includes detailed discussions of how these components interact with seawater and sediment (when known) and the concentrations at which components are known to have ill effects. None of the proposed actions would result in exceedances of EPA water quality criteria.
	additive effects of mixing them with the Navy's toxic effluvia, or of how Naval explosions will stir up poisons such as dioxins, PCBs, and heavy metals lodged in sediments and disperse them into the marine environment.  The Navy authors' apparent assumption that Navy activities occur in a pristine, untouched environment is a dangerous and extremely foolish fiction, compounded by the equally dangerous and foolish assumption that synergism does not occur among Navy pollutants and pre-existing poisons. Fiction and false assumptions have no place in environmental impact statements.	
	Conclusion	
	The above comments are but the tip of the iceberg, as there has not been time to critique the EIS's lengthy discussions of sonar impacts and explosion damage to marine organisms; a brief skim of those sections, however, indicates that they were prepared with the same cavalier indifference to scientific validation as the sections I have discussed above.	
	The EIS's gross omissions, false references, nonexistent references, and blatant, repeated assumptions based on no references at all render the document entirely invalid, both scientifically and legally. The EIS should therefore be withdrawn and the entire proposal re-examined and begun from scratch, with qualified personnel clearly identified and the public adequately informed and involved from the start.	
	The Navy's conduct in both the preparation and the public notification for this EIS has been extremely disillusioning, as it violates not just federal law but the Navy's own proud tradition of integrity and concern for its own people and for the public it serves.	
	(Attached letters dating February 15 <sup>th</sup> and February 12 <sup>th</sup> .)	
Van Strum-27	These comments incorporate by attachment and by reference my preliminary comments of February 15, 2009 and March 8, 2009, on the same EIS. The conclusions of my previous comments remain unaltered and are further	See previous response to this issue.
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	supported by documents finally received in response to my two Freedom of Information Act requests.	
	Given my previous comments as restated, I address here some of the documents received from the Navy in the last two weeks with reference to my comments and conclusions.	
	Depleted Uranium studies.	
	At a televised public meeting with Mendocino County Supervisors on March 31, 2009, Navy representatives announced that due to comments received on the EIS, a directive had been issued ordering the use of depleted uranium by the Pacific Fleet halted immediately, and all stocks of depleted uranium ordnance returned to base. Navy spokesmen promised to provide the supervisors with a copy of the written directive. As of this writing, however, the Navy has not responded to my informal requests for the same document. Therefore, until that directive is made public, I assume that depleted uranium use continues and hereby update my comments.	
	The Navy has now provided copies of the two unpublished, non-peer-reviewed studies upon which it based its conclusions of no significant impact from use of depleted uranium ordnance. I discussed the Toque report in detail in my March 8 comments. The recently provided 1974 Hanson study, "Ecological Considerations of Depleted Uranium Munitions," is in fact not a study, but a review of literature up to 1974 on the subject. At that time, Hanson reports, there was actually no literature at all on the fate of depleted uranium munitions in marine environments, and Hanson's brief survey merely summarizes the few studies on natural uranium in seawater. His unpublished, non-peer-reviewed report repeatedly emphasizes the extreme chemical toxicity, as opposed to radioactive effects, of depleted uranium, and provides . no empirical support for the Navy's finding of no significant impact from dumping of depleted uranium ordnance into coastal waters. Interestingly, the EIS fails to cite Hanson's later analytical and field work on the subject, such as his finding that "the solubility, and hence movement, of uranium through the ecosystem may be greater than anticipated." (Wayne C. Hanson and Felix R. Miera, Jr., "Continued Studies of Long-Term Ecological Effects of Exposure to Uranium," June 1977, Los Alamos Scientific Laboratory report LA-6742, AFATL-TR-77-35.)	
	Even if depleted uranium has in fact been discontinued by the Pacific Fleet, a valid EIS must address the issue because the unidentified amount of DU already dumped in our waters by unstated years or decades of Navy activities is by the Navy's own admission a "baseline" condition for all alternative actions. Moreover, the Navy's reliance on these unpublished, non-peer-reviewed reports to support its No Significant Impact conclusions exemplifies its selective bias, as in other places the authors righteously dismiss unsupportive research because it is unpublished and non-peer-reviewed (see #3 below).	
Van Strum-28	The Navy has provided no materials whatsoever responsive to my	The No Action (baseline) activities are clearly identified in Chapter 2 of

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	request for environmental or other documents that would identify the past and current activities that form the "No Action" alternative presented in the EIS. As both the EIS and related documents state, and as Navy spokepersons have publicly confirmed, these past and current Navy activities are the "baseline" for assessing environmental impacts of proposed future actions. As concluded in my previous comments, the failure of the EIS to identify these "baseline" activities and their cumulative impacts invalidates the entire EIS.	the Draft EIS/OEIS.
	3. Nonexistent research continues to invalidate the EIS and its supporting Biological Evaluation, particularly in the failure to support with any data whatsoever Navy conclusions of no significant impact to birds, mammals, fish, and other marine life from highly toxic chemicals and metals deposited in the water by Navy activities. The recently provided Biological Evaluation (BE), prepared by the same military contractors who prepared the EIS, further compounds this failure, underscoring the extremely selective nature of the Navy's environmental evaluations. The BE is repeatedly cited in the EIS as the primary support for Navy findings of no significant impacts on birds, fish, sea turtles, invertebrates, and marine mammals. In the interests of brevity and boredom prevention, two examples of its inadequacy suffice:	The Draft EIS/OEIS fully meets the requirements of NEPA in every respect.
	a. As noted above, the Navy is happy to rely solely on unpublished, non-peer-reviewed reports that might support its findings of no significant impact, but is quick to dismiss such information when it suggests significant impacts; for example, see Biological Evaluation pp. 5-30, 5-31 dismissing studies showing effects of sound on fish: "much of this literature has not been peer reviewed, and there are	
Van Strum-29	substantial issues with regard to the actual effects of these sounds on fish."  b. Equally telling is the overwhelming bulk of both the EIS and its supporting BE devoted solely to marine mammals and sound. Since preparation of an EIS was prompted by lawsuits over this issue, some extra attention is excusable, but not to the nearly total neglect of other Navy hazards and other forms of marine life. The Navy acknowledges, for example, that of human threats to world-wide small cetacean populations, noise represents 1.1%, while pollution represents a whopping 21.9% (see chart repeated at pages A-9 and 5-62 of BE), yet of some 533 references cited in the BE, only 4 refer to pollution (2 cites) or toxics (2 cites), despite the Navy's acknowledged pollution of coastal waters with highly toxic, carcinogenic chemicals and heavy metals, as discussed in my previous comments. Similarly, out of 533 references, some 334 relate to marine mammals, but only 32 concern fish and even fewer refer to birds and other life forms. This obvious lack of research undermines the Navy's findings of no significant impacts of Navy activities on all forms of marine life, further invalidating an already invalid EIS.	

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	c. Compounding the above shortcomings of both the EIS and the BE	
	is the inexplicable fragmentation of Navy activities and their consequences. Each activity is described and evaluated in isolation	
	from others, as are each species of fish, mammal, reptile, or bird.	
	Nowhere does the EIS consider the totality of Navy activities	
	explosions, vast amounts of ordnance both exploded and	
	unexploded, bilge water releases; sonobuoy disposal, ship engine	
	noise, sonar noise, aircraft engine noise, radio communication	
	noise, discarded shell casings; heavy metal and other toxins,	
	cables, fuel leaks, exhaust, and untold amounts of other debris – in	
	what is in fact a single large body of water housing an	
	interconnected ecosystem. Nowhere does the EIS consider the cumulative impacts of that totality on the ecosystem it impacts: sea	
	floor hazards to trawlers from Navy trash; exposure of marine	
	organisms to toxic compounds; disruption of fish and crab habitat by	
	multiple Navy activities, as well as disruption of the entire marine	
	food chain. This failure inexorably produces further failure to	
	evaluate the impacts on commercial fishing and crabbing as well as	
	recreational fishing, which are so vital to coastal economies and	
	lifestyles.	
	4. Total Failure of Public Participation efforts on this EIS.	The Navy's notification efforts exceeded the requirements of NEPA (40
	According to Navy records, the Navy's expenditures to contractors for its	CFR §1506.6). Please see Appendix F for a complete listing of
		notification efforts to publicize the public meetings.
	were blatantly ignored, such as the well-known need to determine news	
	media deadlines and meet them, in order to have time-sensitive material	
Van Strum-30		
	EIS and present only summaries, with suggested responses, to the Navy.	
	Given these contractors' record so far, I intend to file Freedom of	
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		This comment has been duly noted.
Van Strum-31		
	public participation plan on this EIS totaled \$248,603.00, of which \$71,376 was for advertising alone. As detailed by other commenters and discussed in my previous comments, the Navy met neither its own criteria nor those of NEPA in the actual execution of public participation activities. Indeed, some of the most basic tenets of advertising and public relations were blatantly ignored, such as the well-known need to determine news media deadlines and meet them, in order to have time-sensitive material published before the event advertised occurs. Add to this failure the frequent crashes of the web site set up by the same contractors, the misdirecting of hard copy EISs to the wrong libraries, and the failure to place ads in on-line versions of local papers, and it is hard to imagine more incompetent results for the money.  Compounding the abysmal failure of its contractors to conduct the most basic public involvement functions, the Navy blithely relies on the same contractors to read, select, and summarize all public comments on the EIS and present only summaries, with suggested responses, to the Navy.	CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  This comment has been duly noted.

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	create "truths" with no scientific basis whatsoever. What Baldacci masked as fiction, however, is unacceptable and unlawful under the National Environmental Policy Act. The EIS, the Biological Evaluation, the Letter of Authorization to NOAA, and all other supporting documents should therefore be immediately withdrawn and an honest effort made to meet not just the letter but also the spirit of the National Environmental Policy Act.	
Vohs-01	The Puget Sound basin is not a suitable environment for Navy sonar and explosives training because of it is an echo chamber which causes harmful effects on marine mammals, fish and sea life. Because of the high volume of boat traffic, both commercial and pleasure, the Naval training exercises with subs and ships create a hazard for navigation, create dangerous wakes for small boaters, limit access, effect fish stocks and pollute our fragile environment that many are dependent upon for survival, for work and are what makes Puget Sound a high value area for living and vacationing. The National Marine Sanctuary should also be off limits, as is intended, for the protection of the ecosystem of our NW Pacific and interior waters.  The alternatives offered in the Navy's proposal for expanded training in the Northwest Training Range Complex do not provide adequate protection for humans, animals and environment. I ask the Navy to rework the draft EIS to include the following modifications in all alternatives being considered:	See responses to specific comments below.
Vohs-02	Reduce the potential for oil spills, and collisions by having all submarines on the surface to the approaches to and in the Straits of Juan de Fuca	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Vohs-03	Eliminate all use of depleted uranium by the Navy	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Vohs-04	Ban at-sea dumping practices of the Navy - no old ammo, no petroleum, plastics, toxics, etc.	Table 3.4-2 of the Final EIS/OEIS describes the current Navy policies concerning waste discharge from Navy ships.  Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships.
Vohs-05	Set aside the Olympic Coast National Marine Sanctuary from all training uses	The Navy complies with the National Marine Sanctuaries Act and specifically to the regulations of the OCNMS. The restrictions that apply to the OCNMS were described in Table 6-1 (p. 6-3) of the Draft EIS/OEIS.
Vohs-06	Adopt operational procedures and mitigation measures so as to make extraordinary sonic events less likely to disrupt whale populations.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine

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		mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Vohs-07	Cease all sonar exercises in Puget Sound & Haro Strait to avoid adding stress to the resident Orcas	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Vohs-08	Increase the size of the US Navy's cetacean safety zones to the sizes of those used by other Navies  Avoid key whale habitat by putting some areas off-limits to sonar training Seasonally avoid migration routes and feeding or breeding areas  Monitor for marine mammals thirty minutes before training begins.  Reduce sonar power during times of low visibility, when whales are hard to	The mitigation measured employed by the Navy are based on their effectiveness in providing a measurable level of additional protection, without unnecessarily inhibiting training. The measures described in the comment are each explained in Section 5.2.1.5 under those criteria. Each either has no significant protective effect or reduces training effectiveness, or both.
	Increase the volume of active sonar gradually to give nearby marine mammals a chance to flee  As important as training is to the Navy, I urge you to amend all of the Alternatives with the modifications above.	
Wagner-01	I got my action alert from California Skywatch.com and the out of control testing of sea mammals of the Navy's Warfare Testing grounds to see how much damage of 32 species of animals this crazy government can do. And over a 5 year period. Have you all gone mad? To see what toxic soup of Depleted uranium red & white phosphorous can have on sea animals that we eat. Not only is this country spraying our skies using jetliners with poison in the fuel to kill people. And you have been doing it for decades. Now more testing on sea mammals and fish. This New World Order is out to kill everything & every body to see how much we bleed hemorrhage, etc on & on & on. The American people are the rats & mice. And so are the fish & mammals. Nothing but a bunch of rats & mice. And so are the fish & and out of control you people are your New World Order will die. Cause you are testing your toxic soup on defenseless little animals. How cruel. How sick. You don't give a crap about nobody & nothing. You think animals are here for your own disposal for the sicko Navy to do whatever they want. The U.S. Navy should be banned & ousted from this country and I'm writing to my Congressmen Senators & the White House to file a complaint. U.S. Navy your time is coming. Hell awaits with fire and eternal pain like you never felt before in destroying God's creatures that are here not only to eat but to have companionship & love.  No to testing for 5 years on animals. No you sicko freaks NO NO NO	This comment has been duly noted.
Wainwright-01	I support the ·No Action Alternative" because of the proven and possible adverse impact of the expanded activities.	This comment has been duly noted.

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Waldman-01	As I'm sure you are aware, the oceans are in grave jeopardy, and any further assault upon the health of the systems and creatures within them approaches the suicidal. There must have been enough testing by this time to know what works and what doesn't, and further violence done to the earth by us needs to be stopped, not facilitated. Thank you for the opportunity to express my views.	This comment has been duly noted.
Warburton-01	Saving the life of our oceans is essential. Our water creatures deserve a healthy environment. The Navy has plenty of "practice" space already. The Navy does not need the space as they have excess already. The Sea life has no where else to go. My family has always been Navy supporters. Three of my uncles were WWII Naval veterans. This, however is about LIFE FOR US ALL.	This comment has been duly noted.
Washington Department of Ecology (Washington DOE)- 01	Thank you for the opportunity to comment on the draft environmental impact statement for the Northwest Training Range Complex project located along Washington, Oregon and Northern California coastline. The Department of Ecology (Ecology) reviewed the information provided and has the following comment(s):  AIR QUALITY: Bernard Brady (360) 407-6803  Best management practice for minimization of track out, windblown dust, and explosions should be required in applicable permitting.	The Navy will continue to use best management practices in these areas.
Washington DOE - 02	HAZARDOUS WASTE & TOXICS REDUCTION: Cristiana Figueroa-Kaminsky (360) 407-6342 The applicant must ensure that all waste generated from operations at this site are designated and managed in accordance with the Dangerous Waste Regulations, Chapter 173-303 WAC. The Hazardous Material Section (ES 1. 5. 3) states: "Expended materials include the nonreactive materials that are not recovered following their use in a training activity. While these items represent persistent seabed litter, their strong resistance to degradation and their chemical composition mean that they do not chemically contaminate the surrounding environment by leaching heavy metals or organic compounds. Expended material that sinks to the sea floor would gradually degrade, be overgrown by marine life, or incorporated into the sediments." Such materials must still be designated under WAC 173-303, and managed appropriately.  Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.  If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.	As directed by Section 107 of the Federal Facility Compliance Act (FFCA) of 1992 [an amendment to the Resource Conservation and Recovery Act (RCRA)], the U.S. Environmental Protection Agency (EPA) developed regulations that identify when conventional and chemical military munitions become hazardous waste subject to Subtitle C of RCRA (62 FR 6621, et seq., 1997). This is often referred to as the "military munitions rule." As provided under 40 CFR 266, military munitions are not hazardous wastes under RCRA when they are for their intended purpose, including: 1) training of military personnel and of explosives and emergency response specialists; 2) research, development, testing, and evaluation; and 3) destruction of munitions during range clearance operations.
Washington DOE - 03	Thank you for the opportunity to comment on the draft environmental impact statement for the Northwest Training Range Complex project located along Washington, Oregon and Northern California coastline. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  A more thorough discussion of the fate and transport of military expended material is found in the Final EIS/OEIS.  The Navy believes the proposed activities to be fully consistent with the

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	AIR QUALITY: Qing Chen (360) 407-6809	Clean Water Act.
	Best management practice for minimization of track out and windblown dust should be included in any applicable permitting.	The Navy is pursuing a consistency determination in compliance with the Coastal Zone Management Act.
	SHORELANDS & ENVIRONMENTAL ASSISTANCE: Sarah Lukas (360) 407-7459	
	Section 3.4 describes a significant amount, 183,867, of non-recovered materials or waste products proposed to be Washington State waters in the preferred alternative, or alternative two. The analysis describes several of these materials as containing known contaminants toxic to marine life and degrading to water quality such as lead, arsenic, and cyanide. These waste materials are proposed to remain in Washington State waters and decompose at their own rate. No analysis was submitted examining the impacts from the increased amount of shading due to the placement of these waste materials and the submitted analysis found that none of these materials would adversely affect marine life or water quality. Because no significant impact was found from the placement of these materials, no mitigation was proposed besides compliance with applicable federal laws governing these activities. I recommend the applicant propose removal of these materials from Washington State waters and disposal in appropriate upland locations as mitigation for the proposed activities.	
	The proposed placement of waste materials in Washington waters is not consistent with the Clean Water Act, and the Shoreline Management Act, an enforceable policy of the Coastal Zone Management Act.	
	The applicant will be required to acquire a 401 Water Quality Certification as well as a Coastal Zone Management Act Concurrence from Ecology. I suggest the applicant contact Rebekah Padgett, Federal Permit Manager, Ecology's Northwest Regional Office with any questions regarding this proposal. Ms. Padgett can be reached at (425) 649-7129 or by email at rpad461@ecy.wa.gov.	
	Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.	
	If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.	
	DNR requests that its aquatic land ownership layer be updated to reflect the latest U.S. Navy NWTRC boundaries	These areas are currently designated on NOAA charts. The Navy provided GIS shape files of the NWTRC boundaries to Washington State
Washington Department of Natural Resources (Washington DNR)- 01	DNR maintains records of the uses of aquatic lands. These records are in GIS form, and in the form of "plates" in the Records Division. These records are public. By consistently updating the uses of state-owned aquatic lands, as they change, DNR's Land Managers are better informed about what aquatic lands are currently being used, and which parcels are open for leasing. It is in the US. Navy's best interest to keep DNR informed of any areas located on state-owned aquatic lands which it expands into, or wishes to restrict from any types of normal leasing activities.	DNR in response to this request.

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	Please contact: David Roberts, Assistant Region Manager, (360) 854-2805.	
Washington DNR-02	DNR requests a review of expendable materials as marine debris  This past year, the state legislature placed a renewed emphasis on the need to remove marine debris from Washington waters and aquatic lands. DNR is responsible for the removal of marine plastic debris, under Chapter 79.145 of the Revised Code of Washington.  First, DNR appreciates that the US. Navy works to recover and re-use training materials, particularly training targets. DNR's questions are more towards those materials that the Navy cannot retrieve, and whether a possibility exists for those materials to float on a current or wave out of the NWTRC's jurisdiction, and into a nearshore area not under the U.S. Navy's authority. DNR asks this question based upon this statement from Section E.S. 1.5.3.1., where a discussion of expendable material in the offshore area ends with a conclusion that it may "wash ashore" (inshore area) as "flotsam:"  "While these items represent persistent seabed litter, their strong resistance to degradation and their chemical composition mean that they do not chemically contaminate the surrounding environment by leaching heavy metals or organic compounds. Expended material that sinks to the sea floor would gradually degrade, be overgrown by marine life, or incorporated into the sediments. Floating nonhazardous expended material may be lost from targets and would either degrade over time or wash ashore as flotsam."  Because of the current concern surrounding marine debris, DNR must ask for a more thorough review of expendable materials that could potentially end up in the inshore area (nearshore) including the impacts and removal methods. The U.S. Navy has addressed potential impacts for the offshore area, including entanglement (page 3.8–15), but it remains unclear why even after admitting these materials could wash ashore, no analysis was included for the nearshore habitat and associated fauna.  Some questions to consider: should marine debris occur in the nearshore area associated with expendable materials, would fu	Though the Navy strives to reduce expended materials, some items will remain in the marine environment through normal use for training. The vast majority of this material will sink and is expected to remain in place on the seafloor and never migrate to the nearshore habitat areas. This is primarily due to the strong negative buoyancy characteristics of the materials, the great distance from shore, and the deep water where the majority of Navy training occurs (most training takes place well beyond 12 nm from shore). As training occurs over such a broad area, no particular areas of accumulation are anticipated and no funding has been identified for clean-up projects. Certain items that may potentially migrate to shore have Navy identification and contact numbers stenciled on them. The Navy will respond to these items and remove them on a case-by-case basis as they are reported.
	targets, or parachute materials?	The text in the Final FIS/OFIS has been revised to indicate that the Killer
Washington DNR-03	DNR requests clarification on the Killer Tomato Targets  The Killer Tomato targets are made out of plastic (urethane). If these targets become "expendable material" and wash ashore into DNR's jurisdiction, they will be considered plastic marine debris which DNR is technically responsible for removing. This is particularly of interest to DNR, as Alternative 2 (preferred) shows that the use of these targets will increase to 120 from 60 (No Action).	The text in the Final EIS/OEIS has been revised to indicate that the Killer Tomato is recovered after use.
	The sections which reference the plastic Killer Tomato targets need clarification. Page 3.3-18 states "A 'Killer Tomato' is a large, inflatable, plastic target that can be towed or left stationary." This leaves the reader ambiguous about removal. Discussion of the Killer Tomato is found briefly in the "Targets"	

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	and Countermeasures" tables in the Alternatives Analyses, but again it remains unclear what happens to this target.	
	Table 3.3-25: "Almost half of the targets and countermeasures under Alternatives 1 would be marine markers that are consumed by chemical reactions that produce smoke. Most of the remaining targets and countermeasures are constructed of inert materials and are recovered after use. Should they be lost at sea, they will become buried in bottom sediments or wash up onshore."	
	This paragraph leads us to conclude that Killer Tomatoes would become buried or wash up onshore.	
Washington DNR-04	Table 3.3-33: "Almost half of the targets and countermeasures under Alternatives 1 would be marine markers that are consumed by chemical reactions that produce smoke. Most of the remaining targets and countermeasures are recovered after use. Those that are not are constructed mostly of inert materials." This paragraph leads us to conclude that these would be recovered.	Table 2.10 of the EIS/OEIS lists all expended materials that would be used under each alternative. This table has been revised in the Final EIS/OEIS to annotate which items are recovered. If not specifically listed as "retained" or "recovered," the item would remain in the ocean.
	Clarifying these sections would assist DNR in understanding what our agency's role would be should the recovery of marine plastic debris associated with the U.S. Navy training activities be necessary.	
	In closing, DNR looks forward to working with the Navy as it works to improve its training range. Thank you for the opportunity to comment.	
Waters-01	I strongly urge you to stop all Naval Warfare Testing exercises in our oceans especially here in the Northwest. The decimation of oceans and all of its life is far more detrimental to our existence than that of human war! Without life in our oceans-there is no life on our planet! Game over!	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Weaver-01	I am opposed to any sort of weapons or military training by the navy off of the Pacific Northwest Coast. This activity threatens marine life, the environment and human beings. I am opposed to war of any sort. Thank you for considering my comment.	This comment has been duly noted.
	It is imperative that the Navy withdraw its application for a permit from NOAA to "take" any marine life in its proposed plan of warfare testing on the Pacific	The permit requested by the Navy is for the "Incidental Take" that could occur during Navy training activities.
Weiss-01	Coast. If, as the Navy sates, that it will not harm the marine habitat or any other marine life, why does it need a permit. There is something inconsistent here.  The Ocean must be protected from all toxic chemicals for not only marine life, but all the inhabitants of the land who are dependent on the Ocean for food, economic survival, etc. a health environment makes for useful citizens.	The term "take," as defined in Section 3 (16 USC 1362) of the Marine Mammal Protection Act, means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." The Navy anticipates only harassment and the potential for injury due to its training activities.
Welford-01	I lived in O'ahu, Hawaii from 1993-2007, studying and working at the University of Hawaii. In that time, I watched a progressive increase in the takeover of land, sea, and people by various branches of the military. 25% of land on O'ahu is now occupied by the military. The ocean is similarly impacted, despite a constant protest and fight against this. I foresee a similar progressive increase in military presence on the land, sea, and among people in our neighborhood. The degradation, poisoning, burning, loss of	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

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	species, that has occurred and is occurring in Hawaii will also occur here. I strongly urge all concerned to stop this plan.	
Welford-02	A good friend of mine in Hawaii works as a marine biologist for NMFS, a going by my conversations with him, we cannot trust their reports either. Research by NMFS is limited by effectiveness (never mind that they are a government entity with "interests" of their own). My friend, who is fairly high up in NMFS on O'ahu, told me that very little definite is known about the habits, travels, etc, of fish, marine mammals, birds, etc. Research has huge gaps.  I am aware that military training is not just for some unspecified war off in the future. In Hawaii, training of all sorts is being used specifically to kill, maim, to indelibly harm people in (at this moment) Iraq, Afghanistan, Pakistan ("by mistake"). Let this not be so here. I am completely opposed to this military expansion.	A significant amount of research has been conducted that provides a wealth of knowledge on the subject. There is still much to learn due to the complexity of the issues.  Where the science expresses uncertainty, the EIS/OEIS analysts and authors used a conservative approach, which likely overestimates the effects of Navy training activities on marine mammals.
Wells-01	I would like the ship sinking exercises held in places where recreational divers can use them, increasing tourism.	Due to Environmental Protection Agency requirements, all ship sinking exercises conducted for training must take place in at least 1,000 fathoms of water and at least 50 nautical miles from shore.
Wells-02	No DU shells should be used for the training exercises.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Wells-03	I support increasing use up to the Alternative 1 but the 2 <sup>nd</sup> Alternative looks like it would leave too many waste munitions off Oregon and Washington.	This comment has been duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Wheeling-01	The proposed use of whale endangered species habitat for 10,000+ sonar and sonic explosions, impacts on whales critical migratory area is illegal and unacceptable.  Whales are mammals, they breathe air, like humans, they are living dinosaurs, living history, we can not destroy them based on FEAR.  The military does not have the right. Section 7 seven Endangered Species Act is operational now, again under OBAMA. (Demo)  I can see the whales blow air from my house, what will happen to them? Who will protect them from the military?  No, No way, it's illegal. Time to confront reality, we are not Republicans. The Democrats control both houses of Congress and the Presidency. The plutocratic military industrial complex is a broken model. We can not afford war and military! Stop the FEAR propaganda. No., No MORE Destruction!	This comment has been duly noted.
Wickham-01	The alternatives offered by the Navy for expanded training in then Northwest Training Complex do not provide adequate protection fro humans, animals,	The alternatives analyzed fully meet NEPA requirements.

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	and the environment.	
Wickham-02	I ask the Navy to rework the draft EIS to include the following modifications: Eliminate all use of depleted uranium by the Navy	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Wickham-03	Bann at-sea dumping practices	Table 3.4-2 of the Final EIS/OEIS describes the current Navy policies concerning waste discharge from Navy ships.  Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal
Wikham-04	Exclude the Olympic Coast National Marine Sanctuary from training use	at sea—is not practiced by Navy ships.  The Navy complies with the National Marine Sanctuaries Act and specifically to the regulations of the OCNMS. The restrictions that apply to the OCNMS were described in Table 6-1 (p. 6-3) of the Draft EIS/OEIS.
Wickham-05	Adopt he most stringent rules to be applied in Haro Strait, and Puget Sound to protect cetacean safety zones there.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Wickham-06	As a retiree with some 30 years in the Navy and Air Force, ICBM manufacture, I believe the testing of the new ordnance is best done at the place of manufacture. Additional testing may be done realistically in more industrial areas of the Puget Sound and elsewhere. The location of this testing near the Victorian Seaport of Port Townsend, the Ebbey's Landing Reserve and Whidbey Island and the San Juans orca feeding grounds should be reconsidered.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
California State Senate Second District- Patricia Wiggins (Wiggins)- 01	These comments are in response to the request for public comment on the DEIR for the Northwest Naval Testing Grounds, which range as far south as Humboldt County, California. As State Senator for both Mendocino and Humboldt Counties, it is my duty to represent those of my constituents who have voiced significant opposition to the Navy's plans, both of the process for review and the contents of the DEIR.	The proposed action of the Draft EIS/OEIS includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems.
Wiggins-02	Regarding the process for review, I strongly encourage the Navy to re-notice the public in areas that would be affected by its actions. Mendocino County, specifically, while out of the direct area of impact, has an economy which includes whale and marine mammal viewing as a tourism draw. This is regionally critical to both economy and identity, and could be affected by the Navy's actions relative to gray whales and other marine mammals. Gray whales are of particular importance, because they are a rebounding migratory species with a range including both Mendocino and the project area.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy determined public hearings locations and notification efforts based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, the Navy placed its emphasis on Washington State regarding public hearing locations and notification efforts. Mendocino County is outside of the boundaries of the range

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		complex, but a public hearing was held in Eureka, California.
Wiggins-03	Regarding the contents of the DEIR, I would echo the comments of the Natural Resources Defense Council on the issue of alternatives. The noproject alternative was the status quo, which is itself a project. A cessation of testing needs to be considered as well.  The result needs to be a management regime established for the protection of the whales, marine mammals and fishes as a critical objective because of the communities which depend on them. California's coastal regime presently includes Marine Protected Areas, National Marine Sanctuaries, all designed to enhance its protection. These elements are the building blocks of a well planned coast and ocean, including blue whale and orca populations native to the project area.  The Navy's projects are an important element of national security, which I strongly support. It is my belief that we need not give up reasonable notice and cumulative impact assessment in the name of that security.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).
Wilcox-01	I say do it. What is more important, protecting citizens like me or an animal? I say me as a citizen.  I think this training can be done with sensitivity with citizens in mind.  We aren't all left wingers here on the lost coast.	This comment has been duly noted.
Williams A-01	My comment is that science does not seem to be playing a significant enough role in the decision making process on behalf of the Navy. Our environment and ocean are undeniably in decline. The biggest threat we need protection from is pollution and corporate greed. Our biggest "enemies" are those who threaten the basic life support systems like the ocean itself. What are we protecting?	This comment has been duly noted.
Williams J-01	Do not expand testing. We want open government and full disclosure of deaths of marine mammals such as the whales that died in Florence years ago.  NO sonar, No expansion. The ocean is not yours to bomb, explode exploit and kill. STOP!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Witse-01	We oppose bombing our oceans, killing our sea mammals. Your projection a harbor seal is killed is frightening. Don't use sonar. Don't increase testing along OR Coast.	Although the raw acoustic modeling results indicated a single mortality— to a harbor seal—neither the Navy nor the National Marine Fisheries Service expects any mortalities or serious injuries as a result of the Navy's proposed activities. The acoustic modeling output doesn't reflect the Navy's mitigations measures that would prevent any deaths.
Wohlman-01	Our coast is still a wilderness area. This is precious to coastal residents, and also attracts tourists, who provide a major source of revenue to our local economy.  What sort of visual, acoustic, and pollutant impact will there be on coastal communities?	These impacts are discussed in Chapter 3 of the Draft EIS/OEIS.

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	Specifically, will there be sonic booms, helicopters buzzing, artillery clatter? Will we see ships, planes, flashes from weapons firing?	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Wohlman-02		The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Wohlman-03	What will the NTRC do to the wilderness?	The analysis in the Draft EIS/OEIS indicates no impacts to the wilderness.
Wohlman-04	What does sonar do to communication among grey whales while migrating?	Potential impacts to marine mammals, including grey whales can be found in Section 3.9 of the Draft EIS/OEIS.
Wohlman-05	Many species migrate along the Northern Pacific Coast- not just whales, but also birds, butterflies, other marine animals. Can you guarantee that these migration routes will not be disturbed?	The activities are not expected to impact these migrations.
	Finally, will the Navy suspend sonar operation while the gray whales are migrating?	No, the Navy does not plan on suspending sonar operations during the gray whale migration seasons.
Wohlman-06		The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Wuoltee-01	Expansion of Naval testing areas in the Pacific Northwest concerns me for many reasons:  1) There are unknown long-term effects of modern equipment on sea life- i.e. sonar, chemicals, etc. Expansion would further erode habitat. In an era of global decline this approach is not consistent with best practices for habitat preservation.  2) If damage has been done, preserving areas not exposed to testing would be beneficial in preserving areas of refuge and protecting delicate ecosystems.	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.  The EIS/OEIS has studied all natural resources that could potentially be affected by the proposed action. The Navy has assessed these impacts within Chapter 3, 4, and 5.
Wuoltee-02	It is the cumulative effects of environmental erosion that are causing serious global problems-expansion during a time of known challenges contributes to the problems and	This comment has been duly noted.

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	does not preserve and protect our sea and coastline.	
Wuoltee-03	4) I have observed the retreat of Sierra Nevada glaciers over the last 50 years. At first it was a mystery that they were shrinking, then a concern, and now most are gone. We didn't know 50 years ago there could be a problem. Now Sierra habitats depending on the glaciers are depleted. Not recognizing serious consequences, and not taking steps to prevent them, is not responsible behavior.  We don't want our wonderful resources to dry up and disappear while we are ever-expanding testing to protect these resources Thanks for reading my comment.	This comment has been duly noted.
Wyles-01	I am opposed to the plan to do Naval maneuvers off the West Coast because of the potential disruption of the whale migration and feeding. The whales are an important part of our ocean system, and important to us in Oregon. Any risk to them is significant, especially those species whose populations have been documented as declining. Oregon has a whole system of education and viewing based upon whale movements. There is also documentation about the sonar effects on whales. Don't do it.	This comment has been duly noted.
Zepede-01	I oppose the U.S. Navy's proposed plan for weapons testing in the ocean, in the air and on land in the Pacific Northwest.  I am concerned about the environmental impact to ocean life (plan/animal). As a local Native American, I'm concerned about the delicate balance of the ecosystems in the area.  I request Congress to halt this action until further environmental impacts can be address as mitigated.	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.  The EIS/OEIS has studied all natural resources that could potentially be affected by the proposed action. The Navy has assessed these impacts within Chapter 3, 4, and 5.
Anonymous-01	Please develop the next generation. The current stuff seems to bother sea creatures. The next level of sonar should Thank-You! ©	This comment has been duly noted.

## G.2 Website Comments

The following comments were made via the NWTRC EIS/OEIS website (http://www.nwtrangecomplexeis.com/) and copied exactly as they were written. Personal information has been removed.

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Abascal	Insufficient notice and opportunity to intelligently comment on this complex plan that has significant impact on our environment was provided to the public. Too few public hearings are scheduled. The hearing in the state of Washington is in Aberdeen, an inconvenient location for most citizens. This plan should be halted and notice published in newspapers and other media designed to reach the public.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  Three meetings were held in Washington; Oak Harbor, Pacific Beach, and Aberdeen.
Abdul-Aleem	please no chemical warfare testing in our skys or on our oceans!	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Abel-01	I) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted explosives training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).
		Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."
		(i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:
		(A) Hull integrity tests and other deep water tests;
		(B) Live firing of guns, missiles, torpedoes, and chaff; (C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and

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		(D) Anti-submarine warfare operations.
Abel-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabeds spreading radioactivity to marine life, some of which people eat. The same concern goes with heavy metals being introduced into the waters, moving up the food chain to threaten the health of large mammals and of humans.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Abel-03	3) It is inaccurate to average pollutant concentrations over the entire expanse of the range complex, making levels seem benign. Local concentrations around spent munitions would have much greater concentration of toxicity.	The Final EIS/OEIS approach to this analysis has been revised. To show the effect throughout the entire area, the approach described in the comment has been retained in Section 3.3. To illustrate the potential effect to various species, Sections 3.6 through 3.9 consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. This new approach describes the localized density of expended materials taken from individual activities.
Abel-04	4) War-practice activities are not compatible with a marine sanctuary and should not be considered under any circumstances.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Adams, A.	I am extremely concerned about the Navy's proposed new training program because it increases environmental toxins, exposing babies, children and pregnant moms to unidentified chemicals in unidentified amounts. The Navy must be aware that Washington and Oregon already share a very sad statistic—we have alarmingly high rates of autism compared to the rest of the country. And, according to the CDC's prevalence rates, the disease frequency of autism now surpasses that of all types of cancer combined. Further, it is well established that environmental toxins are a very significant factor in the explosion of autism, which was 1 in 2,000 in the 1980's and is now 1 in 166, according to the CDC. Washington also has some of the highest rates of other diseases, such as MS and certain types of cancer. A new study reviewing counties in Washington, Oregon and California shows that autism is highest in the counties with the greatest rainfall. If the Navy's program were to emit even more chemicals in the air, those of us in Western Washington will be literally showered in that chemical soup, adding to an already critical problem. The Navy's Training Range Program fails to identify what chemicals will be used and how much and it fails to address risk factors to vulnerable populations IN A STATE WHICH IS ALREADY KNOWN TO BE AT MUCH HIGHER RISK. Under the Freedom of Information Act—and before any chemicals are used that pose potential harm to the children and people of Washington State—I request: 1) A complete list of the chemicals to be used in this project 2) Annual quantities of each chemical to be used 3) The Navy's impact study addressing at-risk populations And finally, since our federal government thus far fails to provide adequate funding for the care, education and medical costs of the estimated 279,523 children and adults	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  The analysis of air quality was in Section 3.2.  The Navy's analysis concluded that the impacts to air and water quality are all within Federal standards.

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	with autism in the U.S., what resources will be set aside out of the Navy's budget to help pay the cost of future increases in autism rates which may be attributable to toxic chemicals released by the this training project? The current economic cost in the U.S. is estimated at \$8,385,702,061 annually. What portion is the Navy prepared to pay?	
Adams, M01	I am requesting that the State of California be excluded from this Navy project! Thank you, Martin	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II - which includes offshore areas near the Northern part of California.
Adams, M02	Also, it's not right that you give us only a brief time until March to oppose this move.  Furthermore, this plan of the Navy needs to be more broadly discussed and advertised.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Ahrndt	Please support our aquatic environment and stop sonar testing. I feel the impact on the whales is very destructive.  Thank you,  Janette Ahrndt, MPT	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Ahuna	Doesn't the Navy already know enough about the damage from bombing and from sonar and the devastating and far reaching impacts to humans and water life? Isn't there already enough power to annihilatewhy is more testing neededto make more wars, to kill off the human race, our oceans? One single act that we do to harm one single thing, comes back to us. I thought history should teach us how to BE better, but all we do is repeat our mistakesmake them bigger, more powerful.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Albrecht	Our previous president and his administration's disregard for the environment by authorizing this extended electronic pollution of our Pacific Northwest Coastline is reprehensible. It would be equally reprehensible to have this done to other nations' offshore environments.  This practicing for war instead of practicing peace must stop and stop soon, or the human race will be the next species on the endangered list; because we've destroyed our environment which is what supports us and keeps us	This comment has been duly noted.

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	alive.	
	A copy of this email will be sent to President Obama and his administration.	
	Sincerely,	
	Jo Ann Albrecht	
Allen, E.	Please do not allow this range to disturbe the Wails and the ocean rich upwelling or the Planet will suffer. The enviorenment is so fragel at this time the country can use gwantamo bay in Cuba insted of our own area. There is wild life killed every time a bom is dropped. Why not have the low bidder test his products not the navy. Diane Nelson feels the same too. thanks for your time and consideration. Save the planet!	This comment has been duly noted.
Allen, P.	I recognize the need to maintain military readiness through training, the "no Action Alternative" (maintaining existing training levels) is all that I can support at this time due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's proposed expansion on those species.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Allen, P01	At this time, the Navy needs to fund independent research on the seasonal presence of marine fish, birds and mammals found within their training ranges rather than rely on outdated surveys. I request the Navy provide public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations. This is critically important for orcas and other marine mammals.	An independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
Allen, P02	The Navy needs a proven means to respond to a maritime incident in all their operating areas including interactions between their ships and commercial vessels. Thank you for the opportunity to comment.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Allen, W.	Full Spectrum Dominance is a sham and a waste. Even now there are beings on this planet who posess a technology that can render your most sophisticated and expensive weapons systems inoperative in seconds! Testing in this sensitive coastal area will cause much damage to wildlife and the marine ecosystem! I am outraged by the plan and will work with others to prevent it.	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Allison-01	The San Juan Islands are environmentally sensitive, containing many threatened species. Environmental tourism sustains our economy and will be damaged by noise and pollution pressure from military activity. For quality of living for the islanders I object to increased noise, but I could live with it if I had to.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Allison-02	What I absolutely object to is any sonar being used in this area when so many marine animals are damaged and die from your use of this technology.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of

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	It cannot be justified.	injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Alquoin	I don't approve of this project to extend a training field off of the pacific northwest. I live in Humboldt county and I'm concerned about sonar testing on marine life. In this budget crisis and economic crisis, as well as peacetime, there is no need to expand weapons and training. I urge you to use your monies on something else.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Amberg-01	1) It is absolutely unacceptable to use the Olympic Coast National Marine Sanctuary, west coast of Whidbey Island, and the WA and OR coasts for Navy weapons training esp. sonar testing and depleted uranium dumping. This is our national heritage: wilderness and fragile ocean habitat set aside for the protection of endangered whales, marine mammals & birds.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Amberg-02	2) An extension must be given to the public comment period: The Navy's primary mechanism to receive public comment was non-functional (due to an "abort" issue online) from the Dec. 29, 2008 until Jan 21 (53% of Public Review Period ending Feb 11).	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Amberg-03	3) A "No Action Alternative" is appropriate due to lack of information available to assess the impact on numerous endangered and declining marine species,	This comment has been duly noted.

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	especially with proposed testing of new systems.	
Amberg-04	4) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. thank you Ann Amberg Langley WA 98260	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Ament	I support the No action alternative and strongly oppose any increased military involvement and action in Puget Sound as unnecessary, contrary to our endeavors for peace, environmentally devastating not only to the land but to	This comment has been duly noted.

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	the marine mammals, fish and plant life in the water and on the shore. Stop the insantiy	
Anderson, C	The training activities need to be restricted to a much smaller area than that proposed. It is vital to avoid disrupting whale and dolphin habitats. They are our FINITE resource. The Navy has plenty of other places to train.	This comment has been duly noted.
Anderson, G	The Port of Port Orford provides moorage and launch facilities for 50 active commercial fishing vessels. The crewmen and support services for these vessel comprise fully 10% of the workforce of the community of Port Orford. The Port is located at; 42 44',36N and 124 29',93W in a very rocky, environmentally sensitive area of the the Southern Oregon Coast. In fact one of the only two Marine Reserves in Oregon is located within 3 miles of the Port. The primary fishing grounds for the Port Orford fleet is 30 miles to the South and 25 miles to the North and out approximately 30 miles. Species harvested in this area are; crab, salmon, nearshore rockfish, sablefish and urchins. Tuna is occassionally fished for but often outside of these primary fishing grounds.  Port Orford is in the top 100 of the most commercially productive fishing ports in the nation. Because of the geography of the area, rock outcropping, five reefs and numerous underwater reefs the area hosts many seabirds and marine mammals. To our knowledge no other community on the Oregon Coast relies on the health of the marine environment as heavily as the community of Port Orford.  If there is any way we can help you with this process please don't hesitate to call or email. Thank you Gary Anderson, Port Manager 541-290-4497 portoffice@verizon.net	This comment has been duly noted.
Anderson, J	First I would to thank you for protecting our nation's shores. But it has come to my attention the U.S. Navy has submitted an application for sonar testing along the northeast Pacific, directly in the path of migrating Gray whales. I am writing to ask the U.S. Navy not test sonar in the path of or during the Gray whale's migration window. Sonar kills marine mammals.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Anderson, L	Dear EIS Review Committee, I sincerely hope you consider carefully some of actions that would deposit increased amounts of toxic substances in our precious waters. I see very little benefit associated with this increased level of training, and high costs. I	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed

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	stand in strong opposition, and urge you to consider science-based reasoning such as the Precautionary Principle. Many of our beloved endangered species are in the very waters you suggest this (harmful) activity in, and then attempt to say that this will only affect the fishing industry? Don't many Northwest citizens place a high value on the endangered species that inhabit these waters? And I suppose that uranium breaks down quickly in the natural environment, right? If you consider no other changes, please do everything in your power to limit the amount of spent uranium you're recklessly placing in our environment. I can't even believe that an EIS that suggests the level of spent uranium will increase in the habitat of one of our greatest sources of food would ever pass.  Could you possibly try to explain to me why you need to use live ammunition in your 'training' exercises? I do not believe you've fully considered the benefits vs. the costs associated with such use, particularly the 20mm canon shells that have the uranium. Isn't it your responsibility to do so?  Please do not disregard the possibility to protect BOTH our environment and our seas. I believe this can be accomplished, but the utter lack of concern for the environment shown in the (Navy-preferred) Alternative 2 seems like a complete lack of concern for the former in favor of the latter. I do not think that these preferences are in line with the population this proposal (misleadingly) claims to protect.  Sincerely,  Leif Anderson leifand@u.washington.edu	that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  The NWTRC area extends to the coastline of Washington, Oregon, and Northern California, however, no training that involves live explosives is conducted within 3 nm of shore. Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California.  Live training is used because simulated training does not provide the requisite level of realism necessary to attain combat readiness, and cannot replicate the high-stress environment encountered during combat operations.
Anderson, Marii-01	It is an outrage to the people of the earth the Navy is testing DEPLETED URANIUM in the Northwest waters of the Pacific Ocean and Puget Sound. DU has been thoroughly tested by many respected world scientists. The horrific consequences of this substance are well known it does cause cancer and birth defects; it never fades away. What possible enemy could the US have that is worth contaminating the oceans with DU? Why is there no regard for our food supply? What excuse will the Navy use when we are all glowing from DU contamination?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant. The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be

reated when the round impacts the water and are not created simply by firing the round. Rounds that are on the coean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that have not become covered with encrustation or buried in the ocean bottom. It should be noted that are not be come bottom. It should be noted that are not been with a strength of the control of the common that are not the value of the control of the	ID	Issue Text	Response Text
has also been studied and proven to rupture the inner ear of Whales causing them to become stranded and perish.  Sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Anderson Mari-03  It is well past time for the Navy to consider the future of all marking and stop.  The Navy takes its responsibility seriously to serve as a good steward of			firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies." A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards. Limited scientific studies have been completed on potential environmental impacts of tungsten and tungsten alloys. To date, the studies indicate that the greatest tungsten threat concerns a specif
	Anderson, Mari-02	has also been studied and proven to rupture the inner ear of Whales causing	sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training
	Anderson, Mari-03	It is well past time for the Navy to consider the future of all mankind and stop	

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	this irresponsible testing.	investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Anderson, Mary	The increased training in my area would adversely affect my quality of life and includes my whole neighborhood. I believe that it also effects and causes environmental issues. Please reconsider and allow our rights to be heard and agreed upon.	This comment has been duly noted.
Anderson, Sarah-01	I feel the increase of the planes flying so low to the water is cruelly affecting the salmon and marine life that is already on the endangered species list.	Impacts on fish and marine mammals from noise and aircraft overflights are fully analyzed in Sections 3.7 and 3.9 of the Draft EIS/OEIS.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Anderson, Sarah-02	2) The sonic sound is so deafening to the human ear that it is shaking our houses. This has only gotten worse with time and it seems the military has no respect for the citizens! Please take my neighbors and I into account. I don't feel that there is a need to fly at such a level that effects the human population!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Andersson	What is going on? Whose interest is being served? I see only harm and pain coming to us 4 states first, then to the rest of the United States, and to the whole rest of the world. Who decided these tests are necessary? There are alternatives for the information you seek. Use them, not us.	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Andrews, F.	If there is as much pollution and contamination of our waters as it appears, how could we allow this testing to take place under our waters?	This comment has been duly noted.
Andrews, S.&J.	We are home and business owners living on The Lost coast in Shelter cove, Ca. We have chosen to live and work here to enjoy the peace and quiet and to witness the sea life in our natural surroundings. We have concerns about the noise caused by flights and the disruption to the migrating whales caused by sonar.  Living in a remote area has many challanges, however we feel the benefit of living amongst nature is our reward. Tourism is one of our main sources of income. Up until this year fishing also played a big part of our economy. We have already faced the shutting down of all fishing on our coast line do to enviornmental concerns. We are now dependant on the flow of naturalist as	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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	beauty and quiet of this area are our most valuable assets. To extend your training into this area would jepordise our livelyhood greatly! Thank you for	impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
	your consideration , Stephanie &Jason andrews	Socioeconomic impacts with respect to to the fishing industry, tourism and recreation, and population and housing have been analyzed in the Draft EIS/OEIS in Section 3.14 - Socioeconomics.
Anony	I'm against it	This comment has been duly noted.
Anspach	Please do not use your sonar that damages whales and other marine life. I do NOT choose protection that involves abuse of these creatures. There must be other, more intelligent and humane ways to protect the people of our fine country! Thank you.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Applegate-01	I understand the need for training, and agree with maintaining the existing levels of training activities, but I am concerned about the possible adverse effects of the "expanded activities". Sonar can have detrimental effects of the ears of orcas and other marine mammals, resulting in disorientation and sometimes beaching. The loss of hearing for whales or dolphins almost certainly leads to death. Our Puget Sound orcas are already nearing extinction.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Applegate-02	I am also concerned about the long-term effects of the heavy metals such as tungsten and depleted uranium on the marine environment, and on our human health, placing our entire food chain at risk. I also wonder why our country is directing energy into elaborate military plans and preparation for destruction when we have the opportunities for peaceful negotiation, especially in this time of limited natural and economic resources, and of changing financial stability. Please give our fragile environment more thoughtful consideration.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		Limited scientific studies have been completed on potential environmental impacts of tungsten and tungsten alloys. To date, the studies indicate that the greatest tungsten threat concerns a specific alloy, and only when embedded in animal tissue. Because the tungsten rounds are used only at sea, and only during certain gunnery training exercises, the fate of tungsten at sea is germane. Section 3.3.1.1 of this Final EIS/OEIS analyzes tungsten in sea water.
Applegate-03	Re: Northwest Training Range Complex Draft Environmental Impact Statement	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable

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	1. Access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	connectivity for this website.  To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Applegate-04	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted explosives training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Applegate-05	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat.	See response to depleted uranium issue above.
Applegate-06	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals was discussed in Section 3.3.1.1 of the Draft EIS/OEIS.
Applegate-07	It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS (Deepwater Benthic Habitats beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.

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Applegate-08	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Applegate-09	3. There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The potential of the proposed activities to impact marine organisms has been completely and thoroughly analyzed in Chapter 3 of the Draft EIS/OEIS. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Applegate-10	Therefore, there is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	An independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
Applegate-11	4. The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Applegate-12	5. The Navy needs to demonstrate a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Applegate-13	6. The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured, as well as safety to groundwater in the islands of the Puget Sound, since that is the source of the human water supply.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant. The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will

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		behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies." A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Applegate-14	7. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
archuletta	I strongly object to any military of any type off the california coast.	This comment has been duly noted.
Arness	No, no, no. PLEASE - I strongly object to the U.S. Navy's plan to expand its Puget Sound activities down the coastline.	This comment has been duly noted.
arnold	Do you have a GIS of the proposed training area ? thanks	Figure 1-1 of the Draft EIS/OEIS provides a view of the proposed training area.
Arsenaux	You can use all the verbage, all the excuses, but the bottom line is that what you are doing is wrong. The animals in the oceans and world have as much right as we do to live.  A very wise person said that we can judge humans by their treatment of animals. What you are planning is immoral.	This comment has been duly noted.
Arthur	I am a Canadian, but feel I must voice my concerns to this matter. The stretch of coast line where you intend to carry-out your tests is the home of various types of marine life (including whales). The prospect of all your proposals will only be harmful to the marine life! The prospect of an unground minefield is downright unacceptable! It is proven that whales and dolphins have beached themselves from the effects of sonar. What will your future testing and minefields result in? Please reconsider what you are proposing to do. For the marine life in the area, and the residents in the area, and our future generations, for once put your war hungry attitudes aside and think of the real future of our land and sea. Sincerely, Jana Marie Arthur	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Asadorian	I am 100% against the NW Training Range Complex. It will impact our	This comment has been duly noted.

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	enviroment negatively. We live in an amazing place that needs help right now not more that will harm our region.	
Ashbaugh	While the noise of training flights over Lopez Island is sometimes loud, I want you to know that my wife and I support the mission of the U.S. Navy and will gladly put up with whatever your training needs are. These are perilous times and we rely on you and the rest of the military.	This comment is duly noted.
Asher	I'm opposed to the expansion of firing range activities on the pacific coast for several reasons. First, there will be the obvious disruptions to tourism, commercial fishing, and boating. However, I think the greater concern is the possibility of an accident that could cost lives. Surely this training could be done in less inhabited areas Alaska, perhaps?	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Ashford-01	I am in favor of the No Action Alternive in the Northwest Testing Range Compexies Draft EIS. I oppost the Navy's tests of depleted uranium weapons anywhere;	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Ashford-02	the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them; the invasive testing of any kind in a underwater sanctuary; testing of any kind without independent environmental impact research; and testing without viable citizen oversight of environmental compliance.  I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.  Thank you for your kind and prompt response to this request.  Pushkara Sally Ashford	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).  Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."  (i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:  (A) Hull integrity tests and other deep water tests;  (B) Live firing of guns, missiles, torpedoes, and chaff;  (C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and  (D) Anti-submarine warfare operations.

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		These protected areas, species, and resources have been considered and adequate study has been given within this EIS/OEIS which includes independent review and citizen oversight.
Atherton	As a development engineer for the AN/BQR-21 Polaris Submarine Sonar and a principal development engineer for the MK-50 torpedo, Adcap torpedo, and other Naval Equipment, how do the protestors of this proposed training area expect our ability to detect Chinese and Russian subs off our coast and inland waters? Our Naval forces need training in this area to be successful in detection. I for one, would be much more satisfied that we did our best! Jay Atherton	Thank you for your support.
Atkinson	I suppose this is not the usual position for this forum. I would like to remind folks that the Navy wants to expand it's training areas because there were complaints that the currently used area's are too fragile to continue to use. I do not think that Orca health is dependent on whether the Navy does or does not train locally. Orca health has been impaired much more by toxins in their food chain (from local commerce, farming and industry), that has nothing to do with the Navy. If there were diverse and healthy local Orca Pods, Navy training would have little effect on their health. I have never heard of using (very expensive) uranium depleted munitions during training excercises. The local area has derived major benefits from Navy presence in Everett, Bremerton, Whidbey Island and other places that needed the economic boost and diversification that defense dollars bring. Local training helps control costs and probably even more importantly supports Navy families, by limiting time at sea. This is not rocket science, it is rational. I am sure there are more important things to oppose.	Thank you for your comment.
Atwell-01	I AM DOING MY BEST TO COMMENT ON YOUR US NAVY EIS BUT THERE ARE SO MANY UNCLEAR POINTS THAT IT IS DIFFICULT TO RESPOND CLEARLY OR KNOW JUST WHAT IS INTENDED OR TO BE THE EFFECTS OF THIS PROJECT.  PLEASE READ THE FOLLOWING COMMENT AND ANSWER ALL QUESTIONS BELOW.  1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year?  2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Atwell-02	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Atwell-03	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.

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Atwell-04	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels.	The Navy's primary jet fuel is JP-5.
Atwell-05	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Atwell-06	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Atwell-07	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	The potential impacts of all chemicals used in the proposed activities are found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Atwell-08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.

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Atwell-09	10 - How much money will Washington , Oregon , California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Atwell-10	<ul> <li>11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well.</li> <li>12 - Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.</li> </ul>	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Atwell-11	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military?	No.
Atwell-12	IF THERE IS TO BE ANY IMPACT ON THE HEALTH AND WELL BEING OF MARINE AND/OR HUMAN LIFE DUE TO THIS PROJECTWHICH I BELIEVE THERE IS A GREAT DEAL OF RISK AND HARM TO BE MADETHIS PROJECT MUST STOP AND BE FULLY REVIEWED IMMEDIATELY. THIS COMMENT PERIOD WAS FAR TOO BRIEF AND THE IMPACT OF THESE ACTIVITIES NEEDS FURTHER CLARIFICATION AND ELABORATION.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Atwelli-13	GIVEN THE Environmental Impact Statement AS WRITTEN, I DO NOT AGREE WITH THE CONTINUATION OF THIS NAVY TESTING PLAN IN ANY WAY. FROM WHAT I CAN SEE FROM THIS STATEMENT THE NW TRAINING RANGE COMPLEX IMPACTS WILL REACH FAR BEYOND THE BOUNDS OF THE TESTING SITES THEMSELVES AND LEAD TO IRREPLACEABLE WOUNDS AND DESTRUCTIONS OF THE PRECIOUS HUMAN AND MARINE LIFE IN THIS UNIQUE AND DELICATE REGION. THE HARMFUL EFFECTS FAR OUTWEIGH THE BENEFITS AND THIS AREAESPECIALLY AROUND AREAS OF WHIDBEY ISLAND AND THE OLYMPIC PENINSULA HAVE BECOME TOO DENSELY POPULATED TO BE USED FOR SUCH ACTIVITIES ANY MORE.	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.  The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Aubin	Please be more aware of the impact of Sonar and underground explosions of munitions on the marine life off Washington shores.  Please stop the practice of testing sonar and munitions underwater off WA. shores because of the negative impact of sonar, radiation, heavy metals and explosions on marine wildlife. Thank you for your consideration of this matter.	The full analysis of the effects of sonar and underwater detonations were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Austin	These training exercises need to be halted altogether. Surely there is a better use of the tremendous intelligence, ingenuity, strength, and dedication of our Navy personnel. Surely computers and simulation exercises could provide much, if not all of this kind of information and training at far less cost, both financially and environmentally. Given the current economic crisis in this country, it is more important than ever to invest in creation rather than destruction, peace rather than war, respecting and restoring our environment rather than further unbalancing and degrading it. The proposed training	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standards Program. NMFS-approved Marine

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	exercises would only serve to further pollute and disrupt our already stressed ecosystems. Even with the best monitoring by experienced people, the mitigation measures are woefully inadequate. It is almost impossible to reliably detect marine mammals, visually or acoustically, underwater or in rough weather, especially when compounded by training conditions. At the very least, the Navy should improve the mitigation measures to include training by experienced whale biologists of monitoring personnel to minimize the slaughter of wildlife and the toxic effects from the chemicals and debris resulting from these exercises.	Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Averett	I am in strong disagreement with the Navy's plans to test sonar in the Puget Sound and dump radioactive (supposedly "clean") materials into the waters. The ecosystem around the islands is already fragile with salmon stocks very depleted and the future of our resident orcas and other marine mammals endangered and extremely uncertain. Do not undertake these programs that will surely be regretted. In fact, I would ask that you stop any such practices immediately. We cannot risk our fragile ecosystems. This type of testing is unconscionable. Thank you for your attention.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships.
Averna	This proposed measure would effect sea bird migrations, orca whale movements and the general public. I understand training and readiness are an important aspect of a prepared military, so is a healthy eco system. I oppose this proposal.	This comment has been duly noted.
Ayala	Please don't do the under water sonar and bomb testing off our precious coasts of Washington, Oregon and California. We need to preserve our coasts and animals and water. We may be dependent upon the sea for our water source in the future. Please don't pollute our oceans more than they already are. The sea animals are not immune to this testing. It does harm them. Geez, we pay a high price for war our land, water and air become more polluted. Seems with all our technology available you could find a better way.	The full analysis of the effects of sonar and underwater detonations were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).  The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Ayres-01	This EIS does not go far enough to protect marine mammals as well as humans in the Puget Sound area. Navy drills should not be allowed in Puget Sound nor any other inland waters of Washington for these reasons. The bathymetry of Puget Sound makes it so that hardly anything leaves once it is in the Sound, so all the waste from Navy drills in the Sound will take ages to decompose and will work it's way into our already toxin ecosystem.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Ayres-02	Also having observers looking for whales within 200 meters and passive sonar does not do enough to protect marine mammals, especially the endangered southern resident killer whales. There is no doubt that the killer whales can hear noise and quite likely be disturbed by it further than 200	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of

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	yards away and passive sonar may not catch animals that travel more silently, such as the transient killer whales. Please reconsider this EIS. It is not effective and does not go far enough to protect the Sound and our native marine mammals.	injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Baesman, F.	Dear Sirs:  Thank you for the opportunity to provide input to this EIS. As a resident of Lopez Island, I am deeply concerned about the increased levels of Airborne noise being predicted for the proposed changes for the NW Training Range Complex, and the OHNAS in particular. One of the reasons my wife and I moved to Lopez Island following my retirement was the quiet environment Lopez offered. Every now and then, one of your OHNAS jet jockies decides to rip up the skies over Lopez, but all in all, the Lopez quiet environment has lived up to what we expected when we moved here and seems to fit in with the culture of Lopez. It would really grieve me to see this culture and quietness lost to increased noise from expansion of the OHNAS training operations. In short, it would seriously impact my current quality of life.  So I oppose the proposed OHNAS increased training operations as defined in your documentation until such time as you are able to develop a plan that keeps airborne noise within current operating acoustic levels. (Ref: Draft EIS/OEIS Figure 3.5-3)	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Baesman, C.	I cannot speak to the impact that increased Naval Air Traffic will have on the wildlife in the North Puget Sound. I do hope that is being studied. Bald Eagles, Orca Whales, etc. I do know that our full time residence in on Lopez Island was purchased as a retirement escape from the noise and traffic of more metropolitan area (south sound.) The peace and beauty of this area is our major reason for being here. Since our arrival 6 years ago, fly over activity from Whidbey has increased. It is not frequent, but when it goes overhead it is loud. Doubling that activity would definitely detract from our enjoyment of this peaceful place. It would detract from our quality of life and the value of our home. (We would not have chosen to move here if it were filled with the noise of military fly overs. I have to believe that others would feel the same way. If it has this impact on me, I have to wonder what the impact of the noise would be on the wildlife.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Baker	With regards to the proposed training activities of the Northwest Training Range Complex, I would like to request further consideration be given to the potential detrimental effects which the US Navy would be causing any and all marine life in these waters; including the 3 pods of Southern Resident Orcas whales, listed as Endangered Species since 2005, who frequently pass through the waters of this proposed training range off of the WA Coast. As well as all other marine mammals who are sensitive to the sonar, above &	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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	below water noise, environmental pollutants and all other habitat interferences which would surely result if this proposed plan went into effect.	impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Baldwin, K01	Please describe the effects of SONAR on marine life, particularly commercial, threatened and endangered species and specifically in the Oregon coastal environment. I would like to know, and the decision maker to know, all that is known about the adverse and cumulative effects of active SONAR audio frequencies that will be used on marine life.	The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Baldwin, K02	I would also like to know the degree to which simulator training could replace field deployment of SONAR for training purposes, including the costs and benefits of active deployment vs simulated SONAR excercises.	As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitation to simulated training that necessitate live training, such as that in the NWTRC.
Baldwin, K03	Please provide a comprehensive review of knowledge about the effects of SONAR emissions on marine life, as applicable to the coastal Oregon environment. Are there deficiencies in what is known about the effects of SONAR on marine life? Are there deficiencies in what is known about the effects of SONAR on coastal Oregon marine life? What are these deficiencies? What would the cost be to satisfy the deficiencies in knowledge relative to the cost of simulation training and the cost cost of known and potential unknown harm to the marine environment.	The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Baldwin, K04	Have previous SONAR excercises been monitored for adverse effects on the marine environment? What effects are known from such monitoring. Will the proposed SONAR excercises be monitored for adverse effects on the marine environment? Please describe the nature of monitoring that would be done for the proposed SONAR excercises. Please add my name to the list of interested parties.	Yes they have. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The Navy, in cooperation with the National Marine Fisheries Service, is developing a monitoring plan for Navy activities in the Northwest Training Range Complex.
Baldwin, V.	The government has been testing on the public - everywhere, with barium. <a href="http://video.yahoo.com/watch/1515379/5164698">http://video.yahoo.com/watch/1515379/5164698</a> Could a strange substance found by an Ark-La-Tex man be part of a secret government testing program? That's the question at the heart of a phenomenon called "Chemtrails." In a KSLA News 12 investigation, Reporter Jeff Ferrell shows us the results of testing we had done about what's in our skies.	This comment has been duly noted.
Ballantine-01	If implemented, the Navy's plans will intensify the level of noise, violent explosions, and hazardous materials released into our already stressed environment. These would pose significant risks to the	This comment has been duly noted.

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	wildlife that depends on the area for breeding, feeding, navigating, and avoiding predatorsin short, for their survival.	
Ballantine-02	The Navy's plan to escalate use of active sonar, which has been implicated in marine mammal injuries and deaths, and the expected pollution to come from this project (including depleted uranium contamination) makes this idea much too environmentally and socially costly in the long-term. It is not sustainable and serves only to further militarize our community, not to make it safer. I object to the Navy's plans for the Pacific Northwest Training Range Complex.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Bamberger	I am a tax payer that does not support the use of the North Oregon Coast line for training purposes. I challenge the Navy to come up with a better scenario. If this type of training is really needed.	This comment has been duly noted.
Baptie	I THINK THE NAVY SHOULD NOT GO AHEAD WITH THIS DUE TO THE COST TO THE ENVIRONMENT AND THE CREATURES RESIDING IN IT. THERE MUST BE ANOTHER WAY TO TEST YOUR WEAPONS IE COMPUTER PROGRAMS ETC. THAT DOES NOT HAVE ANY EFFECT ON THE ENVIRONMENT.	As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitations to simulated training that necessitate live training, such as that in the NWTRC.
Barber	There has not been sufficient announcement to the public of these hearings or of the navy's proposal to create this training range complex over our heads and in our waters. Why has this not been announced through the media? I also notice that the public hearings are held in small towns near the coast, and further that they are held on weekdays when most people work. This is absolutely unacceptable. I am strongly urging that the March 11 deadline be postponed and that sufficient notice be given to the residents of the affected states.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the Navy's proposed actions would take place off the coasts of Washington, Oregon, and Northern California, that is where the Navy placed its emphasis regarding public hearing locations.

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Bargreen	Comments: First, we would like to thank you for your service to our country, and for allowing affected citizens to comment on your proposed plans. The Navy has always been a good and cooperative neighbor in the San Juan Islands, and we understand that a certain amount of jet noise is unavoidable if you are to continue doing your jobs well.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne, but does not correspond to an increase in either aircraft flights or flight hours.  Under the proposed action flights would not increase over the San Juan Islands.
	However: the new proposal to double the number of training flights over the San Juan Islands has caused serious concern for us, our family and our neighbors on Lopez Island.	Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
	First of all, we don't understand the necessity for doubling the training flights: has the base suddenly doubled its population of pilots?	
	Second, we don't understand why more of the training flights can't take place on simulators instead of wasting vast amounts of fuel in expensive airplanes and annoying/endangering all the neighbors and wildlife beneath you.	
	Third, why can't more of the training flights take place over open water, instead of over land? This would not only reduce the noise, but also the danger to people and wildlife below, in case of crashes or fuel dumps. You are right next to extensive waterways. You don't need to buzz the islands.	
	Fourth, what about the issue of those fuel dumps that would presumably be doubled if you double flights? Orcas, eagles and other wildlife are already under threat of extinction from mankind's changes in their environment. Adding extra layers of noise and pollution is a step in the wrong direction, not the right direction. Jet fuel is exceedingly toxic, and the San Juans environment is highly sensitive.	
	Please reconsider these plans to expand the sorties. We feel very strongly about this.  Sincerely, Melinda Bargreen and family	
Barnett-01	Without adequate notice in local newspapers of each and every community on the coast; and without adequate meetings held along the coast at intervals adequate to serve the people living here; the citizens of this area have had their rights impinged.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Barnett-02	Additionally, holding military exercises in the waters of Oregon state are against the decades long policy of having no military installations in Oregon.	The training activities proposed in the EIS/OEIS occur beyond 12 nm which is outside state waters.
Barnett-03	The dangers of sonar to ocean wildlife have been extensively documented. The fishing industry on the Oregon coast provides several of the small communities with their principal industry.  Please reconsider your actions.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Barsamian	There are currently 63 species listed as endangered in the Georgia Basin. Having a "look out" on the front of a ship is tantamount to wearing blinders to the situation at hand. Of the 63 species listed as threatened or endangered by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants were the most frequent causes listed in status reviews for	This comment has been duly noted.

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	species declines. Your activities will not only add to the stress of the species discussed but potentially add to their demise. Just today, President Obama overturned the Bush Administration's endangered species rule upon which your request for increased Naval actions rests its laurels.  Allow the scientific process to reign and STOP the upswing of operations. Living on San Juan Island we already have to watch the activities, helpless to the impact on our environment. Why does this need to INCREASE in a region that is so stressed as it is?	
Barton	This is totally out of line. Do not proceed with this plan.!	This comment has been duly noted.
Bartoswh	Please stop messing with these sonar sensitive animals! You wouldn't mess with the guy sitting beside you.	This comment has been duly noted.
Bastai-01	I have been living in Oak Harbor and listening to your buzzing airplanes since 2004. I don't know who on earth can make such a statement as you did at page 3.5-15, chapter "Acoustic Environment" of your EIS: "Because sound-generating events are intermittent, occur in remote areas or off-limits areas, and do not expose a substantial number of human receptors to high noise levels, no sensitive receptors are likely to be exposed to sound from military activities under the No Action Alternative."  You may have all the good intentions but such a claim is ridiculous and unacceptable. I am blessed that I do not live in close vicinity to your air strips like some unlucky folks do. The noise that your aircraft make can be rather unbearable at times over my house and I have experienced even worse noise pollution from your jets at several friends' houses who have to lock themselves inside because the noise is simply deafening.  You want the new EA-18G really badly. I don't blame you; the older EA-6B has probably past its shelve life. You claim that the new airplanes do make less noise. To be honest with you I hardly believe it.  The question that is buzzing my brain is: why do these airplanes have to be so loud? To save money at the expense of defenseless citizens who, at the end of the day, they have to put up with them whether they like them or not?	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Bastai-02	I think the Navy needs to reduce the amount of operations not to increase them to reduce the amount the number of marine animals killed directly with the blasting of bombs and weapons and indirectly through a slower less detectable ocean bottom and water pollution and should stop dumping trash in the ocean more than 3 miles away from the US coast.  For these reasons I support the "NO ACTION ALTERNATIVE".  Best regards, Elisabetta Bastai	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Baylor-01	I am in favor of the No Action Alternative in the Northwest Testing Range Compexies Draft EIS.  I am opposing the Navy's testing of depleted uranium weapons anywhere & also the use of underwater tests that might damage the hearing of whales	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to

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and other aquatic life or cause other harm to them.	public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
I am also opposed to invasive testing of any kind in a underwater sanctuary & testing of any kind without independent environmental impact research; and opposing testing without viable citizen oversight of environmental compliance.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
I strongly urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems – as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples. Thank you very much, Dena Baylor, Cincinnati	This comment has been duly noted.
We are very concerned about the U.S.Navy's plans to increase training for crews at its Northwest Training Range Complex. The resulting excercises will increase flights, and residents of San Juan Islands will suffer more noise pollution yet. My family lives at the south end of Lopez, where we have had a sharp increase in frequency and noise level of air traffic from Whidbey Island. We cannot hear the radio when planes fly overhead, and when we sit outside we need to shout to hear each other. And you suggest that it will get worse? The decibel level is so high that life goes on 'hold' until the sky clears. And then in a few minutes the horror repeats, and repeats. For a generation or more, whatever the Navy does is under the guise of such neo-Soviet-like-excuses as "The Noise of Freedom."	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Whatever the navy plans for us is to be accepted as patriotism. Throughout history, the military does what it will - and in the current situation the noise pollution having proved to be unhealthy, with ultimately severe effects on blood pressure, neurological diseases etc., we folks must accept being victims, along with the whales, birds etc. We must be 'patriotic.' So if defending our nation includes making the citizenry sick - so be it. The Navy brass knows what's best for us! cc: sent to Sen.Murray and Cantwell	This comment has been duly noted.
Plan to share information collected during testing.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Site to be used is old. Methods you are using may cause untofore inexperienced consequences to marine & mammale life.	This comment has been duly noted.
3. Use less invasive techniques to minimize damage to all environments.	This comment has been duly noted.
Last summer, on a beautiful and cool Oregon evening, a Navy jet let to with a sonic boom that scared this neighborhooe to calling the police. We reported a bomb type explosion.  We don't want war on the Oregon coast. Beef up the submarines.  I am married to a former nuclear submariner - who is proud that for ten years after the Victory war, it was the language traces time for quite a while	This comment has been duly noted.
	and other aquatic life or cause other harm to them.  I am also opposed to invasive testing of any kind in a underwater sanctuary & testing of any kind without independent environmental impact research; and opposing testing without viable citizen oversight of environmental compliance.  I strongly urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems — as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples. Thank you very much, Dena Baylor, Cincinnati We are very concerned about the U.S.Navy's plans to increase training for crews at its Northwest Training Range Complex. The resulting excercises will increase flights, and residents of San Juan Islands will suffer more noise pollution yet. My family lives at the south end of Lopez, where we have had a sharp increase in frequency and noise level of air traffic from Whidbey Island. We cannot hear the radio when planes fly overhead, and when we sit outside we need to shout to hear each other. And you suggest that it will get worse? The decibel level is so high that life goes on 'hold' until the sky clears. And then in a few minutes the horror repeats, and repeats. For a generation or more, whatever the Navy does is under the guise of such neo-Soviet-like-excuses as "The Noise of Freedom."  Whatever the navy plans for us is to be accepted as patriotism. Throughout history, the military does what it will - and in the current situation the noise pollution having proved to be unhealthy, with ultimately severe effects on blood pressure, neurological diseases etc., we folks must accept being victims, along with the whales, birds etc. We must be 'patriotic.' So if defending our nation includes making the citizenry sick - so be it. The Navy brass knows what's best for usl cc: sent to Sen.Murray and Cantwell  1. Plan to share information collected during testing.  2. Site to be used is old. Methods you are using may cause untofore inexperienced conseque

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Go out into a non-neighborhood. Americans have had enough of criminals running our country and going to battle too easily.  Please let us have peace in the Northwest on the coast.  Stpehanie Begley-Smith	
I am very concerned that despite the real evidence, and beached whales, you continue to use sonar and underwater explosions in the oceans.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
It is also distressing that you fire depleted uranium into the ocean, which everyone knows is radioactive and harmful to marine life. Please stop these earth-unfriendly practices!	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
the American public is tired of all the bleep about "national security" which allows agencies and business to do as they please. The proposed Navy expansion of its Puget Sound activities along the Northwest Coast is unjustified and an usurpation of power. Cease and Desist.	This comment has been duly noted.
I was listening to the info on the website about stewardship. This is an opportunity for the Navy and other military to really be stewards of our collective oceans. These oceans belong to the peoples of the world not the gonernments or the military. Step up and be true stewards for the people and the ocean inhabitants. Navy sonar has, by emperical data collected, injured untold numbers of cetaceans and most likely many other sea inhabitants. Be responsible not self absorbed. Step up and be responsible.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
March 9, 2009 Via Electronic Comments and Mailed Copy Att: Mrs. Kimberly Kler NWT RC EIS Naval Facilities Engineering and Command Northwest 1101 Taulog Circle, Suite 203 Silverdale, WA 98315-1101 RE: Northwest Training Range Complex / Environmental Impact Statement (EIS) / Overseas Environmental Impact Statement (OEIS) / Comments of Lincoln County Oregon  Dear Mrs. Kler: On behalf the Board of Commissioners, Lincoln County is	The errors in Section 3.14 concerning trawl and troll fleets have been corrected.  It is important to note that the activities of the proposed action take place in the same area and at approximately the same level as they have for decades. The fishing industry can expect no noticeable change in their level of interaction with the Navy in the NWTRC.  There are no restricted areas in the NWTRC. Normal right of way for
	Go out into a non-neighborhood. Americans have had enough of criminals running our country and going to battle too easily. Please let us have peace in the Northwest on the coast. Stpehanie Begley-Smith  I am very concerned that despite the real evidence, and beached whales, you continue to use sonar and underwater explosions in the oceans.  It is also distressing that you fire depleted uranium into the ocean, which everyone knows is radioactive and harmful to marine life. Please stop these earth-unfriendly practices!  the American public is tired of all the bleep about "national security" which allows agencies and business to do as they please. The proposed Navy expansion of its Puget Sound activities along the Northwest Coast is unjustified and an usurpation of power. Cease and Desist.  I was listening to the info on the website about stewardship. This is an opportunity for the Navy and other military to really be stewards of our collective oceans. These oceans belong to the peoples of the world not the gonernments or the military. Step up and be true stewards for the people and the ocean inhabitants. Navy sonar has, by emperical data collected, injured untold numbers of cetaceans and most likely many other sea inhabitants. Be responsible not self absorbed. Step up and be responsible.  March 9, 2009 Via Electronic Comments and Mailed Copy Att. Mrs. Kimberly Kler NWT RC EIS Naval Facilities Engineering and Command Northwest 1101 Taulog Circle, Suite 203 Silverdale, WA 98315-1101 RE: Northwest Training Range Complex / Environmental Impact Statement (CEIS) / Overseas Environmental Impact Statement (OEIS) / Comments of Lincoln County Oregon

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	OEIS. Lincoln County joins with many local groups and individuals commenting on the proposal and specifically references, supports and incorporates the comments of the Port of Newport and Dr. Bruce Mate concerning the proposal into its position on this matter. We offer the following additional comments: 1. There is clearly a lack of understanding and knowledge expressed in the EIS and OEIS about both the operations of, and the potential conflicts with, Oregon's commercial fishing fleets. A glaring example of that basic lack of understanding is the inability to distinguish between the trawl and troll fleets as it relates to bottom fish. That is unacceptable.  Commercial fishing involves different gear, fishing strategies, and locations depending on the ocean resource being harvested. The EIS/OEIS inadequately identify those resources and harvesting techniques and locations and therefore fail to adequately address potential conflicts. Much more work is needed in this area in both risk assessment and mitigation. The Port of Newport's letter stresses the importance to Oregon Coastal economies of the fishing industry. That must be recognized and protected. There needs to be increased communication between the Navy and Oregon's commercial and recreational fishing interests for this to go forward.	fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
Belmont-02	2. Marine mammal impacts and integration with the Marine Mammal Act are concerns that need to be further addressed. The comments of Dr. Bruce Mate clearly identify deficiencies in the assessment of risk and in mitigation that must be corrected. We support Dr. Mate's comments and concerns.	The Navy is in full compliance with the Marine Mammal Protection Act and has engaged the National Marine Fisheries Service as part of this process. Dr. Mate has identified no specific deficiencies in the Draft EIS/OEIS. The EIS/OEIS analysis is thorough and complete.
Belmont-03	3. We are very concerned with the potential environmental and economic impact of planned residual marine debris (from shells and other sources) from the increased training proposed. A much more thorough examination of the impacts on our ocean ecosystem is needed.	A thorough and complete analysis of military expended materials was conducted and described in the Draft EIS/OEIS. Please see Sections 3.3 through 3.10 for analysis of potential impacts on each resource area. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Belmont-04	Thank you for the opportunity to submit these comments during the expanded comment period. Further opportunities to provide detailed information and understanding of our concerns, and to insure that adequate assessment of the proposal occurs before decisions are made, remains a priority for Lincoln County. Given the width and breadth of other comments made by concerned citizens, groups and local and state governments, we request that the Navy further expand its public involvement process to insure that proper stewardship of the ocean resources remains the first priority while meeting the Navy's training needs. Sincerely, Wayne Belmont Wayne Belmont County Counsel c. Lincoln County Board of Commissioners Senator	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	Ron Wyden Senator Jeff Merkley Congressman Kurt Schrader Governor Ted Kulongoski Port of Newport Dr. Bruce Mate	
Bennett	I feel strongly that, because we live in a climate of fear, we are preoccupied with human security in a very narrow range. The exercises proprosed by the Navy are an example of this. I believe that there is a very likely harm to the natural marine environment of the wide ranging exercises proposed. Chemical, radioactive and sonar pollution is bound to occur. We would not know the extent of the damage until many years from now. For true safety we must begin to respect the other species and natural evolution of our marine environment. That environment is a resource to be sure, but not for warfare. Thank you.	This comment has been duly noted.
Berg	As a resident of California, I wholeheartedly oppose the escalation of the Navy Warfare Testing Program in Washington, Oregon, Idaho and California. I will keep this simple and to the point: What is being proposed is nothing short of insane. The program may already have started despite a "stay of execution" thanks to Congressman Mike Thompson. I am ashamed that the Navy belongs to the same species as I do. Then perhaps you do not? What is going on here is inhumanity to everything on this planet. Have you been told that every living thing here is your enemy, and that they have to be destroyed at all costs? May there be real justice for all, including the Navy and all military branches, at the end of the line. Anne M. Berg Valencia, CA	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Bergstein-01	Please extend the comment period for this critical EIS.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Bergstein-02	2. I and People For Puget Sound, feel it is totally inappropriate to have detonation zones and Navy training zones in Admiralty Inlet and in Port Townsend Bay. This area is highly trafficed by pleasure boaters, tankers, and freighers. It is also a location of a huge amount of species that are under Federal protection, including Orcas, Whales, and various species of Salmon. It is not appropriate to be detonating explosives given these conditions!	The issues raised in this comment are all addressed in the Draft EIS/OEIS. The analysis concluded that there are minimal impacts to the resources listed in the comment.
Berlatsky	There are currently 63 species listed as endangerd in the Georgia Basin. Having a "look out" on the front of a ship is tantamount to wearing blinders to the situation at hand. Of the 63 species listed as threatened or endangered by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants were the most frequent causes listed in status reviews for species declines. Your activities will not only add to the stress of the species discussed but potentially add to their demise. Just today, President Obama overturned the Bush Administration's endangered species rule upon which your requests for increased Naval actions rests its laurels. Allow the scientific process to reign and STOP the upswing of operations. Living on San Juan Island we already have to watch the activities, helpless to the impact on our enviroment. Why	This comment has been duly noted.

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	does this need to INCREASE in a region that is so stressed as it is?	
Berman	I object to the expansion of naval activities in the Northwest! Please do not continue with the program.	This comment has been duly noted.
Bernstein	My husband and I are totally opposed to the navy's use of sonar anywhere near all whales & dolphins. There is no question that the use of sonar adversely affects these mammals and has been deadly. Our country has signed international agreements protecting whales. The navy has no right to harm them and the area proposed has regular vast migrations + is home to a small population of endangered ones. If they can harm them then the Japanese + Norwegians will use this breaking of agreements to kill more. The threat from subs is so miniscule as to be ridiculous, but this is definitely the wrong place. The survival of whales is more important than your training. Besides, we are all economically hurting; the military has to contract, not expand.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Berrigan	To Whom It May Concern; I am writing to you because I am very concerned over your plan to do weapon testing in the Pacific Ocean off the coast of Mendocino, Oregon and Washington. This plan is definitely not well thought out or in the interests of the planet. You will be impacting adversely the whales which have a migratory pattern here and all the fish and other forms of sea live. The ocean is being destroyed by many other forms of pollution but this could possibly and probably be the worst. For the sake of the planet and our children I request that you give up this idea. Weapons are not the way to go to insure world peace. Sincerely, Sandra Berrigan	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Bertero	To: The Men & Women who serve in the US Navy As long as you are taking every measure to minimize the impact of training operations as you perform your sworn duty to protect the men & women of the United States: we as the citizens you risk your lives to protect, should just be damn proud of you and thank you for your sacrifices. Please put me down for a yeah on your request. Thank you from me and my family for keeping us safe in a dangerous world. To state the obvious, not all the people you are sworn to protect understand the gravity of the events that shape our world. The sad part is that they sit in the warm comfort of their homes as they complain about the very people who protect their freedom to do just that. I am sorry that you even have to listen to the griping. Such is a democracy. Please tell everyone you serve with that there are still people who live in Northern California that are proud of you and support your important mission for the United States of America.  Sincerely, James. B. Bertero, Jr 707-887-1307	Thank you for your comment.
Bevis	As a concerned citizen I want to express to you my heartfelt outrage and what you are considering off the west coast of the Pacific Northwest. The oceans, the mammals, fish and living creatures are already hanging on by a	This comment has been duly noted.

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	thread. Must you make it so much worse for them? And what about the people who live around this coast and many who make their living from our ocean? Please please reconsider and re-examine the data that does not support this. Jeanne Bevis	
Bickford-01	Based on what I can assimilate from the Proposed Alternatives, I support Alternative I over the No Action Alternative because of the stated decrease in underwater detonations. I am concerned that the Navy did not consult known whale authorities outside of the Navy, so it is difficult to assess your assertion of "no significant effects" to marine mammals from Active Sonar. When working for the government, I was ingrained with the rule that "significance" had to be measurable. My understanding is that not enough information is available to accurately measure the impacts of sonar on marine life. Schedule activities outside of whale migration seasons. Avoid areas where resident whale pods exist.	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.  The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Bickford-02	I am also concerned about the effects of Naval activities on the distribution of marine life, e.g. if the fish move, the predators move. This could impact offshore fishing by seabirds, such as the federally threatened marbled murrelets, which travel huge distances from their nests every day to fish for their young. Please schedule the training outside of the crucial nesting season for seabirds. Avoid offshore and nearshore fisheries along the California, Oregon and Washington Coasts.	The conclusions reached in the Draft EIS/OEIS are clear that there are no significant impacts to the species mentioned in the comment. Therefore, restricting activities would provide no additional benefit to these species.
Bickford-03	In addition: Manage all vessels to a "zero oil spill" policy. Coordinate with the California, Oregon and Washington governors' offices as they work to develop territorial sea plans and marine reserves/ protected areas.	Navy policies concerning oil spill prevention and coordination on territorial sea plans go beyond the scope of this EIS/OEIS.
Bickford-04	Provide for INDEPENDENT monitoring of Naval training activities in order to develop more accurate data and models used to evaluate "significance" and the effects of training activities. This could be a learning opportunity that provides important feedback for the future. No convincing case was made for the economic or scientific benefits of Alternative 2. Therefore, I recommend selecting Alternative 1. (Again, I would select the No Action Alternative except for the decrease in underwater detonations.) Carol E. Bickford PO Box 408, 48455 Proposal Rock Loop Neskowin, OR 97149	Many of the Navy's actions require regulatory permits from other governmental agencies. As part of the permitting process these agencies conduct independent reviews of the Navy's actions.
Bill-01	I am seriously concerned by this proposed project. The noise impact of current flyovers is so loud that conversations must stop. I understand that the frequency could increase as much as 4 times the existing number. Not only does this impact the residents of our area but also could have an impact on tourist visitation which is a major and important source of income for our economy.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.  Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Bill-02	How can visual survey of the seas give an accurate indication of marine life in the area and the impact that testing is sure to have not only on the mammals	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in

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	but the rapidly diminishing bird populations and fish as well. I am not in favor of these tests and the consequences they will have on the environment and the community we live in .	this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.
		Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standards Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
		Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Bird	The last thing the world and this country needs is more militarism, more violence, more bombs, more American terrorism. Find a different way to engage with the rest of the world than mass killing. Please do not extend the training range. Reduce it!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Bishop, B.	I am concerned about doubling the flights out of Whidbey NAS. I understand the need for flight training and even repeated touch-n-go's. But already there are many days when the windows rattle because a navy plane flies so low over the south end of Lopez. As I understand, the flights are restricted below 3,000 feet over Lopez, but this seems to be routinely ignored. Please don't double the amount flight - especially if you can't keep the airman in appropriate airspaces. Thanks.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  Under the proposed action flights would not increase over the San Juan Islands. Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Bishop, D.	I support the "no action alternative" (maintaining existing training levels) in regards to the expansions planned by the Navy for its Northwest Training Range Complex. As important as training is to the Navy, we support the No Action Alternative due to the proposed testing of new weapon systems and the lack of information available to assess the impact on numerous endangered and declining marine species.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Bishop, S.	I am absolutely shocked that until this week there was nothing in the San Juan County papers about Navy plans to Double the Sorties out of Whidbey. BIGGEST ISSUE: NOISE!!! Already unacceptable. We have constant days of loud noise, and many, many nights until well past midnight. The very nature of what makes the San Juans the pristine, natural wonder they are is constantly threatened by the continuous, loud, and unrelenting NOISE. To increase this constant distraction by any amount counteracts the lives of the local people and wildlife. You threaten to destroy the amazing beauty, peace, and natural harmony of the San Juan Islands.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The proposed action of this EIS/OEIS does not include NAS Whidbey

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		Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Bishton	The Navy's plan for doing sonar training in the Pacific Northwest is very flawed, and should not go forward! The resident Orca Whale population is experiencing a high degree of environmental stress as it is, and millions of dollars are being spent in the Puget Sound area to decrease some of those stress factors for them and for our endangered salmon populations. The additional burden and strain put on them by sonar training could undue much of the gains that all the current environmental efforts will achieve. Please do not go forward with these solar training plans!	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Black	As a volunteer programmer on the County public broadcasting station, I can assure you that weapons training off the Mendocino coast will bring you the worst of headaches in terms of PR. Believe me, there is sizable and vigorous consciousness here which disapproves your plan.	Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Blackburn	The oceans are much smaller communities than we usually think of them. We cannot afford to despoil these valuable communities merely because the damage we inflict is for the most part invisible to us.	This comment has been duly noted.
Blomberg, G01	Please do nothing at NAS Whidby to increase jet noise, there is plenty already. Population is very high here and increasing. Another location farther from civilian noise needs to be found. Thank You, Gregg Blomberg	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced
Blomberg, G02	A couple weeks ago I submitted comments about the expanded use of NASW and the "bumping up" of the west coast states for increased levels of training and warfare experimentation. Since then I have learned much more about the proposal and its potential ill effects on humans and the environment. I believe the Navy plans are not in the best interest of the areas peoples or life forms. The Navy has consistently refused to stop sonar testing that has been proven to harm marine life. In light of this and the inadequate information contained in the Navys EIS I urge all the powers that be to cease and desist these plans to expand their already invasive activities. At the least	the EA-6B.  The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.

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	all of the possible ill effects of this proposal need to be revealed and public comment needs an expanded time frame. Thank you, Gregg Blomberg, Lopez	
Blomberg, I.	Dear US Navy, I appreciate that you are open to public comment on the training expansion taking place at the Whidbey Island base. As a resident and mother living on the south end of Lopez Island I beg you to please not increase the number of planes that fly over, especially loud aircraft. When a military plane flies over we all have to cover our ears and all conversation is put to a halt until the sound dissipates, which can be a couple of minutes. As infants and toddlers, our children break out into screams of fear and hide when some of the military aircraft fly over. The noise pollution generated from some of the military aircraft is unacceptable. I beg you to focus on developing aircraft that generate less sound pollution, especially if you must have more aircraft flying over the San Juan Islands. We, the people are not the only citizens being affected please consider the animal kingdom that is also affected by your actions. Thank you for taking the time to read my comments.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that could occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Blomberg, Z.	I understand the need to train, but I don't like the sound pollution that influences my life.  I would think that you(the navy) could get the training you need without being a problem to the local taxpayers.	This comment has been duly noted.
Bloodroot-01	The simple additional mitigation measure timing and planning all trainings to avoid times and areas of known concentrations of marine mammals is not offered by the EIS.	Section 5.2.1.5 of the Draft EIS/OEIS explains why seasonal restrictions are not a viable mitigation measure.
Bloodroot-02	As well, appropriate NETA "reasonable alternative" analyses have not been provided in the EIS for the proposed increased kinds and numbers of arranged events. The alternative analyses that are presented are too limited. Biologically important areas, places where (for example) whales migrate and marine mammals gather to forage, need to be specifically excluded from all trainings. Impact assessment on the use of sonabuoys needs to address the fact that by the proposed increase in use and numbers of mid-frequency active (MFA) sonar, their affects are cumulative with the increased ambient ocean noise level. These combined noise levels can cause death in marine mammals. Ambient ocean noise has already increased ten times in the 20-80 Hz range, and doubled at the 100 Hz level in the last 33 years (Andrews et al 2002). Since ASW activities have taken place for decades, even a no change in the frequency and intensity of training represents an increase in ocean noise level. Level B harassment (behavior changes and temporary hearing loss) can result in marine mammal death (NMSS 2007 Biological Opinion on Effects of Composite Training Unit Exercises, etc). By impairing foraging, causing physiological disruption, reducing ability to detect predators, increasing stress, and compromising the ability to communicate, the changes caused by impaired hearing to marine mammals can lead to death.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis.
Bluestein	I strongly oppose the expansion of the "Northwest Training Range Complex"	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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	to include the Mendocino and Humboldt Counties' California coastal waters. These waters, including their animal and plant inhabitants, are a vital source of health to our environment and life as we know it. The potential for devastation to this natural resource is a frightening idea, one which I strongly hope never comes to fruition. I urge the powers that be not to tamper with our fragile coastal waters.	proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Boettcher	PLEASE reconsider, and drop plans to expand training exercises in our Puget Sound area. Too much damage to marine mammals and pollution of our waters with depleted uranium munitions is already occurring! Please don't increase it.	All water pollution concerns of Navy actions are handled in Section 3.4. Water Resources.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Boling	Using US citizens for target practice?! This is insane! NO! Our government is mad to even think of doing this. You have already poisoned parts of the Mid. East, Asia and E. Europe with depleted (misnomer) uranium and toxic war chemicals. We've all seen enough pictures of deformed babies. Just stop this insane behavior!	This comment has been duly noted.
Bolsta-01	My husband and I are opposed to any naval operations along our coast, here in Mendocino County.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Bolsta-02	Your plan for expansion of your weapons program is against the deep principles of safety for us all. It is not environmentally sound, in fact you will create an extreme and dangerous nuisance on our coast.  You will disturb pretty much every element here, and the wildlife and human life as well.  We do not want to live with any of the following and are deeply concerned about all of it: effects on sediment quality, water quality; impacts to marine life and habitat that may be affected from sound, hazardous materials and pollution; noise from aircraft; underwater detonations; the disturbance of nesting or migratory waterfowl, shore birds, or other avian species; habitat fragmentation from land use; damage to cultural and historical resources, interference with tribal fishing and tribal ceremonial harvesting and potential impacts to commercial and recreational fishing.  Stop your expansion.  Sincerely, Hyla and Jack Bolsta	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below.  Section 3.1 Geology and Soils Section 3.2 Air Quality Section 3.3 Hazardous Materials Section 3.4 Water Resources Section 3.5 Acoustic Environment Section 3.6 Marine Plants and Invertebrates Section 3.7 Fish Section 3.10 Birds Section 3.11 Terrestrial Biological Resources Section 3.12 Cultural Resources The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of

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		negatively affecting the fishing industry.
Bonnville-01	Dear Folks. I currently live with "The sound of freedom" and have for MANY years. The idea if stepping up testing and takeoffs and landings at Whidbey Navel Airbase is upsetting. I have certainly noticed the larger magnetude as I am pressed down from the sound already!! More flights?? Please NO!!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Bonnville-02	I am also aware of a new testing program for the costal area including sonar and chemicals. This is just not acceptable especially in such a populated area!! Please figure out another way to boost your programs without endangering life. With Respect for ALL, Deborah Bonnville	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems. Neither is the Navy proposing the testing of any chemicals.
Boosinger, M01	I am opposed to expanded testing by the Navy and request more time to alert the citizens of this plan. The time is way overdue to end our national obsession with war. It is time to stop poisoning people and the environment in the name of "national safety." We are not only NOT any safer, but the chemicals, sonar equipment, detonations, etc., used during routine testing are endangering our own health and that of marine life. The gray whales are migrating north right now. Weapons testing will kill or injure them, especially the babies making the journey of thousands of miles for the first time.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Boosinger, M02	Why won't the Navy release a detailed listing of the chemicals they plan to use?	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Boosinger, M03	Why were we given so little time to comment? Why weren't there more public hearings?	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.
Boosinger, W.	The Navy did not allow sufficient time for citizen response to their ill-advised plan to expand weapons testing over several states and at sea. I protest the rush to implement this program without adequate forewarning to the millions of people who will be negatively impacted by it! I protest the poisoning of our environment and all living beings in it! I protest the continual preparations for war under the guise of "national security!"	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Boreen	Thanks for extending the comment period, thus giving this unorganized citizen a chance to register my hope for fewer, rather than more, over flights. The economy, the environment and my ears all unite in calling for more virtual training and the minimum of actual air time for the pilots.	This comment has been duly noted.
Bottcher	Please extend the public comment process regarding expansion of Naval training operations on the U.S. Northwest coast for an additional 30-day period. The League and possibly other groups need more time to study the environmental issues of this expansion.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Bounds	What a terrible idea to train off the Oregon Coast. Oregon has spent years protecting its coast from developers and protecting the waters to the vegetation line for all people to appreciate. What happens when we have our	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed

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	twice annual beach cleanup? Do we send children out to pick up the ORDINANCE? What protections do we have to enjoy walks on the beach, picnics, and other activities? This is a bad idea and shows no consideration for Oregonians and the millions of tourists who come here to visit. There are too many unanswered questions to the safety of people who live and work here, not to mention the errant shots which have the potential of striking any number of houses and businesses which are built on the very edge above the vegetation. What protections do people have from sonar disabling their hearing? This project must be stalled until all answers about safety are answered. Linda Bounds 994-5599	within Section 3.16; Public Health and Safety.
Bowman	Leave the Oceans alone. Your experiments only do more damage. Haven't we as Humans learned that we can't continue doing the damage to the environment that we've been doing. This must stop. The public doesn't want more irreversable damage done to our oceans and fisheries. Stop the Rape of the oceans, Thank you, Debra Bowman	This comment has been duly noted.
Bowne	We, the people, do not want any military activity nearby. One wonders when this sickness will end?	This comment has been duly noted.
Boyd, J.	I am writing to you about the proposed expansion of the NWTRC. I understand the need to protect our country. I understand the need to conduct practice drills to hone the skills of service men and women and test the platforms they operate on. But I don't think the US Navy truly understands how unique and critical the Salish Sea area is. Based on my personal observations and first-hand experiences with the Navy in and around the San Juans, the demonstrated levels of comprehension of this unique ecosystem is lacking on the part of the Navy. I have witnessed US Navy ships using active sonar in the presence of Southern Resident Killer Whales. The captain of that vessel stated he was unaware of whales in the area despite the presence of many whale watching vessels and multiple calls on VHF radio hailing said captain. I have personally witnessed and photographed Navy helicopters hovering over whales at low altitude so they could take some whale pictures. I have heard the Navy using training areas to conduct live fire training in the Strait of Juan de Fuca when whales were passing through. I have witnessed personally Naval jets circling whales repeatedly.  Now the US Navy wants to expand the NWTRC to include even more habitat frequented by the Killer Whales, including a portion of Lopez Island. The SRKW are an endangered species and have enough problems to deal with without the presence of the military during critical feeding and breeding seasons. These whales are here for a majority of the year, yet to many of us who follow the whales and are trying to be good stewards of this fragile ecosystem, the US Navy doesn't seem to get it. And it's not hard at all to correct this. Don't do exercises when whales may be present in our area (it's a given that from April-November they are here). There are many easy ways to find out if whales are in the area on a day-to-day basis. Monitor the VHF	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.  The Navy does not conduct live fire training in the Strait of Juan de Fuca.

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	for whale chatter. Call the Center for Whale Research or check on Orca Network. Listen to the many hydrophone arrays along the islands and Straits (here are fourLime Kiln, Open Bay, Port Townsend, Neah Bay). These whales need our help to survive, and the US Navy could really take a huge step forward by working with NGO's and others to minimize their impact instead of increasing it.  Thank you for the opportunity to share my opinions.	
Boyd, L01	Re: NO to expansion of NW Training Range Complex. Please EXTEND PUBLIC COMMENT PERIOD. The U.S. Commander of the Pacific Fleet has given American citizens and residents of Washington only a very short time to comment on their draft EIS: Published on December 30, 2008, with a final public comment deadline extended to March 11, 2009, this document is	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.
	approximately 1,000+/- pages in length with attachments. In addition to a short comment time the Navy limited public hearings to five, with only one	Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
	held in Oregon , one in California and no hearings in Idaho. The Navy has failed to fully inform the public and our elected representatives about this program.	The only area of Idaho that is part of the proposed activities is approximately 60 nm <sup>2</sup> of airspace that extends from northwestern Washington into northwestern Idaho.
		Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; and February 26, 2009-Tillamook, OR.
Boyd, L02	Such testing will contaminate our air, water, and soils with the chemicals used in these programs. There is a short listing of hazardous materials, air pollutants, and pollutants from munitions, expended materials, and radioactive materials to be used in this project. We deserve a complete list of ALL materials and testing. PLEASE POSTPONE THE PROGRAM UNTIL THE PUBLIC HAS HAD TIME AND OPPORTUNITY TO REVIEW THE DRAFT IES. National security is not working if it destroys the environment and endangers the health and welfare of US citizens. Thank you, Linda Boyd Director, Eastside FOR	The potential impacts of all hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Boysen	Please discontinue and forego any plans to test military weapons or maneuver on our West Coast. You can do this much better off the end of the Aleutian Islands chain and send a message to Russia at the same time.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Bradbury	What the hell do you think you can do something like this? without properly telling the news media or any other proper chanels? You will have hell to pay if you try testing weapons on the west coast of the states, don't even try it. There are sites to testing in NV and they are not on public lands or in our	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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	oceans	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Brandon	Times have changed, we the people have spoken via the presidential election. Its time to consult with the community in which you are operating. To hear that the Navy needs to increase its sonar activities in Pudget Sound is not healthy for the Orca. Orca bring many visitor to PS. They are wild, free and beautiful. Have a serious discussion with the marine wildlife scientist and the local communities of Pudget Sound BEFORE you act.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Breitwisch-01	To Kimberly Kler NWTRC EIS/OEIS: For the following reasons, I believe a "No Action Alternative" is the reasonable conclusion to reach in this matter.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Breitwisch-02	Prior to an expansion of training, the Navy needs to fund new and independent research on the seasonal presence of marine fish, birds and mammals found within the training ranges.	NEPA does not require the funding of new and independent research; however, an independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
Breitwisch-03	The Navy needs to provide the public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Breitwisch-04	The Navy needs to provide a plan for interactions between marine animals and ships.	There are many measures in place to avoid interactions between marine mammals and ships, please refer to mitigation measures in Chapter 5 of the Draft EIS.
Breitwisch-05	It is difficult to identify the presence of sea animals either visually or via auditory signals. Thus, it is important that personnel be trained to be cetacean observers by whale biologists. For these reasons, a "No Action Alternative" is the preferred option at this time. Thank you. Corry Breitwisch	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.
		Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standards Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
		Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.

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Brennan-01	This shows the irresponsibility of government and military in determining the best course of action to deal with our problems.  This activity unnecessarily causes harm to the species including ENDANGERED species, interferes with commerce in this economic recession and further insults and inhibits local native american tribes from their traditional activities.  Furthermore, such tests and practices serve no purpose in the war on terror. Modern terrorists have no access to naval forces and pirates are not using submarines. Therefore, being that the cold war is over (and has been for quite some time and in fact we are now working together with Russia) we have no use for technologies and tactics designed to detect and capture or destroy enemy submarines. Therefore, the use of sonar which causes problems for marine life is completely useless. Also, underwater demolitions are completely irresponsible in that they destroy things that could be used if nothing else for scrap metal while also causing harm to the nearby environment. This bears great resemblance to the unnecessary and extremely dangerous nuclear test detonations on U.S. and foreign soil.	The global proliferation of extremely quiet submarines poses a critical threat to the maritime interests of our military alliances and allies. The military use of sonar, and the ability to test and train with it, is critical to U.S. operational readiness and our national defense. Indeed, the national security interests of many nations require that naval forces be able to train with, test, and employ active sonar.  Military training now is critical to ensure preparedness should our forces be called into action. We cannot in good conscience send American men and women into potential trouble spots without adequate training to defend themselves.
Brennan-02	In addition, with the current economic crisis the navy is doing this in an area very important to commerce and other economic activities. Also, the navy is wasting taxpayer money on a useless expenditure, when there are many more appropriate uses of this money.	The potential economic impacts of the Navy's proposed action are described in Section 3.14 of the Draft EIS.
Brennan-03	Finally, this interferes with traditional native american activities and culture when we have already caused enormous and irreversible harm to them. We have no right to interfere with these people that did nothing to us and, in fact, aided early settlers and also even assisted us in the world war. Unfortunately, these harms have already happened and cannot be reversed, but we can respect and treat these people fairly.  In closing, this is a wasteful, harmful, irresponsible and utterly useless action by the military that not only shows a lack of respect for the environment, but also works to dissuade people from wanting to be a part of the service that would create such harm even against the wishes of those it is there to protect.	The potential impacts to Native American Tribes from the Navy's proposed action are described in Section 3.12 of the Draft EIS.
Brickman-01	Naval Range EIS Comment March 11, 2009 To Whom This May Concern, I am writing this to voice my concern that the EIS for the expansion of the Naval Northwest Training Complex is vague and incomplete and flawed. I believe we need to have more details on which weapons would be tested and why they need to be tested over simultied trainings.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Brickman-02	Also some of the data seems non relevant. The problems of pollution from other sources should not be made a buffer for the damage the navy has already done to its range. The dat on the Southern Orca states that their population is stble when last year seven are confirmed missing and one other Orca was put on the list recently	New information concerning the southern resident killer whale population has been added to the Final EIS/OEIS.
Brickman-03	I believe that four ordinances that were described as possible per nautical	The potential impacts of hazardous materials resulting from the Navy's

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	mile is a massive amount of likely highly poisonous material would have unknown cumulative consequences. This was not addressed sufficiently. I believe that there are other means of training that wouldn't have such a high cost, monetarily and environmentally. Thank-you, There are many other issues that need serious thought, study and time to address. I hope that wisdom prevails over fear. Sincerely, Nancy Brickman PO BOX 1641 Friday Harbor,WA 98250 360-378-5356 brickman@rockisland.com	activities were described in Section 3.3 of the Draft EIS/OEIS.
Brockway	I suspect the current plan is causing enough damage and disruption to marine life and habitat. I am opposed to alternative ONE and alternative TWO. NO ADDITIONAL SONAR ACTIVITY, NO SINKEX. Thank you for this opportunity to comment.	This comment has been duly noted.
Bromley	Do what it takes to keep our county safe, but do take as much care as you can to not harm the environment.  We need to have our military prepared to defend and safeguard us and I realize that it takes training to do that.	This comment has been duly noted.
Brown, C.	The environmental impacts are widely spread with the proposed training and need much better documentation for evaluation by the public. Please delay excercise until this is completed.  Thank you	This comment has been duly noted.
Brown, L01	To Whose Unhearing Ears I do Not Expect a Logical Response: I, for environmental, moral, and logical reasons, do not want the Navy, or any other branch of the U.S. Military, to drop depleted uranium into the Puget Sound or Pacific Ocean- as I eat food from these areas. Please do not pollute my natural areas and my food that I eat. Many people eat from these areas. What is wrong with any of you that you think this is a good idea? Please stop destroying the natural world.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Brown, L02	I also do not want the Navy to increase it's use of sonar in the Puget Sound or Pacific Ocean as it is obvious that this practice is damaging to the very sensitive organs responsible for sonar in marine mammals.  I vote for a No Action option, in which your present actions are maintained, with no additional sonar added and no depleted uranium dropped and no more damage done haven't you done enough? Why can't you just stop? Sincerely, Lindsey Brown 360-791-7417	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Brown, S.	Please cease any further testing in the oceans. The earth belongs to all of us, including the fish and other ocean life that will be hurt or extinguished by testing. We are all part of one chain of life, and it is imperative that we wake up to this fact now and treat the earth with absolute respect due to it, in both	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while

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	its name and the name of our children and their children.	carrying out the ongoing national defense mission.  To prevent harm and train effectively, mitigation measures are implemented. The Navy's protective measures are effective at mitigating, not eliminating, risk to all natural resources.
Brown, T.	Re: Expansion of the Northwest Training Range Complex I am so appalled by this proposal that I do not where to even start complaining Naval exercises in a wildlife refuge Noise and water pollution where Orca whales are already disappearing faster than we can count Diesel pollution in one of the few remaining pristine environments left in this country Exercises being carried out anywhere near population by long range submarines and other naval vessels The inmates are truly running the asylum called the U.S. Military. Please consider that there are better, saner alternatives to this situation. TeriLyn Brown Friday Harbor, WA 98250	This comment has been duly noted.
Browne	My family and I are strongly opposed to the U.S. Navy "taking" 32 SPECIES OF MARINE MAMMALS IN YOUR 5-YEAR WARFARE TESTING PROGRAM IN THE PACIFIC OCEAN. This is unconscionable act.	This comment has been duly noted.
Brunkow	I strongly support increased training levels at NUW. It is in our country's best interest. The sound overhead is the sound of freedom.  Bob Brunkow	This comment has been duly noted.
Buchanan, A.	Please stop this madness now! See the problems the Australians had after their sonar testing.	This comment has been duly noted.
Buchanan, C.	Your jets fly over us already and we find the noise to be unsettling and disturbing. It creates anxiety and makes us feel on edge. We (a family of 5) would prefer it if you did not fly so close to us. Thank you, Catherine Buchanan	This comment has been duly noted.
Buckley, M.	I would prefer that no additional flights would be performed in the San Juan Island WA area. If you would have questions concerning this please feel free to contact me on 360-317-6582	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Buckley, S.	There are currently 63 species listed as endangerd in the Georgia Basin. Having a "look out" on the front of a ship is tantamount to wearing blinders to	This comment has been duly noted.

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	the situation at hand. Of the 63 species listed as threatened or endangered by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants were the most frequent causes listed in status reviews for species declines. Your activities will not only add to the stress of the species discussed but potentially add to their demise. Just today, President Obama overturned the Bush Administration's endangered species rule upon which your requests for increased Naval actions rests its laurels. Allow the scientific process to reign and STOP the upswing of operations. Living on San Juan Island we already have to watch the activities, helpless to your war games. Why does this need to INCREASE? Take it somewhere else!!!	
Bucknam-01	I question the cost and applicability of the increased training being proposed in the two alternatives. I realize the EIS is not the place to address this issue, but as a citizen and tax payer I question the Navy's need to increase spending at a time when the country faces an economic crises and there is no opposing country or enemy with naval forces that would require the mandated six strike-group response. The U.S. spends almost as much on its military as all other nations combined, but the only "war" we are fighting is against poor people who live in shacks and caves and attack with improvised weapons. We face no enemy that has any significant number of battleships or submarines to fight a naval war against.	The global proliferation of extremely quiet submarines poses a critical threat to the maritime interests of our military alliances and allies. The military use of sonar, and the ability to test and train with it, is critical to U.S. operational readiness and our national defense. Indeed, the national security interests of many nations require that naval forces be able to train with, test, and employ active sonar.  Military training now is critical to ensure preparedness should our forces be called into action. We cannot in good conscience send American men and women into potential trouble spots without adequate training to defend themselves.
Bucknam-02	The NWTRC plan does not seem to mitigate damage to marine mammals from active sonar use sufficiently. Ramp-up techniques could be used in choke points to "sweep" marine mammals from the area before training exercises begin. ASW use could be curtailed at night and during poor visibility (that is, when the watchstanders and lookouts will be ineffective) in areas known to be seasonally used by marine mammals without drastic impact to training flexibility.	The Navy and the National Marine Fisheries Service (NMFS) collaborated on the mitigation measures proposed in the Draft EIS/OEIS. The Navy believes these measure are very effective.  Other restrictions such as recommended in the comment were considered in the Draft EIS/OEIS in Section 5.2.1.5 – Alternative Mitigation Measures Considered but Eliminated. This section explains why these measures fail to provide any added protection to marine species.
Burdick	Per your Draft EIS/OEIS, the Navy plans to conduct increased testing and explosions in the coastal waters of the Pacific Northwest. I am gravely concerned about the serious threat this action will pose to the sea life of the area, especially whales and dolphins, and to ecosystem of our costal area. We are all dependent on the ocean for food, water and the stability of our environment. Our oceans are already seriously depleted in sea mammals & large fish, coral reefs are being rapidly destroyed, and oxygen depleted in large areas of ocean. It is short-sighted to believe that we can continue to abuse our costal waters and the oceans as a whole and not expect to further unbalance the global ecosystem on which ALL life (INCLUDING HUMAN) depends. How is such testing protecting us when it endangers our very environment? If we are to survive as a species and as a planetary system, it is high time that we think of the future of our children and grand children before deciding to initiate irrevocable harmful actions Thank you in advance for taking these thoughts seriously. Penny I. Burdick, MD Family Physician	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Buresh	I understand the importance of keeping our nation safe. We also have	This comment has been duly noted.

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	another responsibility and that is to protect our animals.	
	These beautiful creatures have been swimming up and down our coast for thousands of years. We have only been here a short while, and I expect that these beautiful creatures will be here when we are dead and gone. God gave us the ability to understand and reason, we must protect these animals it's our job to do this.	
	There must be another way to practice and train or navy soliders. Can you not go out further? I understand it will cost more but it's our responsibility to consider what damage we may be doing. It's not our ocean it belongs to the whales, we just happen to be out there in our boats and subs playing war games, that may never be needed.	
	It's not the way it was intended to be.	
	Please consider another option.	
	Randy	
Burgett	What's this?? Please consider extending the deadline for public comment. I only JUST heard of it this evening, March 11 and consider the proposition of very high priority for the residents of this area. Few people are aware of the intentions of this NTRC and the environmental impact it would have on our region.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Burke	To whom it may concern: Do not increase flight activity over the San Juan islands. The world has been devastated enough by so called "security" measures. More air traffic only means more noise pollution. This area deserves to be kept as unsullied as possible by the impacts of industrialization. When I first moved to the island neighbors told me the jets were not allowed to fly over the north end; I do not know where they got this information, but it has proven to be sadly untrue. I want to hear eagles chirping not the awful drone of some huge tin machine in the sky. Thank you for your time. Please think of the lives you impact with your decisions.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Burkhardt	Disruptions in the marine upwelling area off the Northern California coast between point arena and the Oregon border could have very adverse effects on our fisheries along the entire west coast. This mineral & plankton rich	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
	upwelling area is at the base of the food chain. If you mess it up while testing new weapon systems the overall environmental and commercial consequences could be quite severe. Therefore I support the NO ACTION ALTERNATIVE as the only responsible one to choose. Better to keep the training up north and out of sensitive ocean food production areas.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Burton	How dare you even consider this expansion of war games into our peaceful community? We will not stand for it. We are not at war with our marine brethren. We should not be at war with anybody. There is no room on this planet to have enemies.	This comment has been duly noted.
Burton Bell	Dear Sir, i am formally opposed to expansion of jet training in Puget Sound/georgia basin. Theeee impact on human life and wildlife is too great.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur

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	Simulation and practice over non-settled land must be investigated before destroying our quality of life sincerely, jane Burton Bell	in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Busic	I admantly object to the Navy's plan to expand its Puget Sound activities down the coastline to northern California. We need to keep our commercia & sportsI fishing, tourism, surfing, and boating safe and active here on the Pacific Northwest coastline. Particularly in times likes this when so many need the peace and quiet to survive this economic crisis. I vote NO to expansion.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Butler-01	There's no need to spend the badly needed resources for welfare and education on a obsolete notion that our waters and coastlines need to be so heavily defended with wasteful military might. More streamlined and cost effective effort for counter terrorism measures must be taken in-land to screen port facility and keep the Mexican Drug traffic mafia violence from infiltrating the USA! Training in such a broad range of costal waters will also have a devastating effect on our already fragile costal ecosystem.	This comment has been duly noted.
Butler-02	With regard to high-intensity sonar, I do not believe that the interests of whales are really seriously considered. Very strong links exist between this sonar testing and damage to whale populations. The Navy's assessment of the harm cannot be assumed to be objective, as they have their own interests and priorities. These mammals can hear over distances far greater than the Navy could realistically patrol, and permanent damage to their long-range, sensitive hearing that is essentially guaranteed. Obviously, they cannot cover their ears during the tests.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
		The authors of the EIS/OEIS (named in Chapter 7 of the Draft EIS/OEIS) drew heavily from over 1,000 independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Butte	Planes from the Whidbey Island Naval Air Station fly so low and are so loud that they disturb the shorebirds in our area. (Let alone what they do to ME!!) You cannot speak to someone standing next to you when they roar over. Is this necessary? In a populated area why must they fly over at all? Use the	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to

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	area over the ocean.	an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Bynum-01	1) Although there is concern among some residents of the Methow Valley about your jet patrols (as witnessed thru a Bulletin Board discussion), I believe that they are infrequent enough at the current level to not reduce the rural quality of life here. They bring the sight/sound/speed of skilled aviators.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Bynum-02	2) I am concerned about any use of sonar in Puget Sound and the surrounding ocean. Although to the best of my knowledge no conclusive studies have been done, there certainly is evidence that sonar may adversely affect marine mammals. The Navy should not use sonar unless and until the Navy can prove after analysis using the MANY variables that may occur naturally that the Navy is not and will not have a current or cumulative effect on marine mammals.	No sonar is being used for training in the Puget Sound. With regard to offshore sonar, the U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
C.	i would like you to please refrain from doing any kind of testing in the waters that result in any kind of harm or injury to any sea animal - this is a very serious thing, aside from the killing of these peaceful creatures that breaks the hearts of many, it is also screwing of the balance of nature- which all of us fall under. none of us is above the master governance of mother nature.	This comment has been duly noted.
	since humans have been alive and mixing their technology into exploring the earth, more and more species have also been discovered and catalogued, yes- but also therefore recorded as having reached extinction. as the smaller creatures depart, the food chain gets affected and soon, we will be a part of the extinction.	
	so, if you cannot possibly find it within yourself to stop hurting other species, will you not at least realize that you are only going to hurt your own species, including quite possibly your very own self, but surely your children and your grandchildren? if we take on the attitude that the native americans used for sustainable living, in regard to making choices that do not affect the next 7 generations, then we can hopefully stay in balance with mother earth and continue to live long and healthy lives.	
	thank you for stopping for awhile to really consider what damage you are possibly doing, and see that by looking beyond your own self and personal interests, you are quite possibly helping create a sustainable way for you to	

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	continue to live here, as well as the many generations that are to come after your relatively short life (in the grand scheme of things) passes.  jc	
Cahill	Please do not do this to our unique national treasure, the beautiful North Coast. We should be spending money to preserve our part of the Earth not on bombing it.	This comment has been duly noted.
Caldwell-01	I have seen first hand the damage naval training does to the oceanic fauna. I studied the orca whales for several years in the Haro Straight and watched as their feeding, resting, and travel behaviors changed to accomodate naval sonar tests as well as the impacts of tourists chasing them. The number of mortalities that washed up on shore increased significantly since the navy gained permission to test its sonar. It works guys! No more testing needed, especially not in such an enclosed areas as the Puget Sound.  I suggest you train for diplomacy and problem solving rather than combat. Our world and country will go far and the great fauna of the Pacific will still be there for our grandchildren and their grandchildren.  Respectfully and gratefully, Adrienne C Caldwell	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Caldwell-02	This land and ocean are not yours. They belong to no one and therefore we all deserve a say in what occurs on and around them, especially when it affects the health and wellbeing of ourselves, our children, and our fellow species. Our culture seems to disregard the fact that this planet is finite and closed- that whatever is done to one part of the world effects the whole. I strongly disagree with the Navy's practice of bombing and sonar military testing in the Sound's waters. This obviously greatly impacts all the life that lives in and relies upon the Sound. I doubt that this will get read, i doubt that you give a damn, but these words come non the less. We will fight back.	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Callaghan	I am adamantly opposed to the expansion of the training grounds for the Navy into the North West Pacific Coast. Our marine environment is fragile and has been degraded enough over the past decades. I vote NO for any training exercises in the coastal waters! Thank you, Pamela Callaghan	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Cam-01	the questions: 1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year? 2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Cam-02	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Cam-03	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.

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Cam-04	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website.	The Navy's primary jet fuel is JP-5.
Cam-05	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in th
Cam-06	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Cam-07	8 - Toxicity of Red and White Phosphorus - humans, wildlife, soils, water supplies, marine life.	The potential impacts of all chemicals used in the proposed activities are found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Cam-08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.

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	be used in these programs and their toxicity.	
Cam-09	10 - How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Cam-10	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well. 12 - Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Cam-11	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military? A rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake along with the human health effects and dead marine life.	No.
Cam-12	None of this proposal sounds very trivial, yet given the lack of publicity and minimal comment period, the navy is treating it as such. please take your own plans seriously and give us more time. thank you,	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Cameron-01	I support the "No Action" alternative, although it is hardly "no action" since it provides for training actions at the current levels. I do so out of concern for both our federal budget and concerns for environmental and economic impacts associated with the proposed activities.	NEPA regulations both require analysis of a no-action alternative and provide that in situations involving ongoing activities, as with Navy actions in the NWTRC, that it is appropriate for the no-action alternative to reflect a baseline of ongoing actions. This is the approach properly taken in developing alternatives for this DEIS. (See #3 of CEQ's Forty Most Asked Questions).
Cameron-02	As the Navy's own analysis has shown, impacts to marine mammals and birds are likely, although the EIS has determined that such impacts are "not significant." Considering how many assumptions are built into the models, versus actual data, this could be wishful thinking. For instance, the summary of possible impacts to marine mammals from exposure to "active sonar" in the preferred alternative indicated more than 117,000 annual exposures that exceed the SPL dose and "potentially results in behavioral harassment" as well as 480 exposures that exceed the TTS threshold. The number of exposures to high-explosives in the preferred alternative was 262 annual exposures of potential behavioral harassment, 199 exposures of potential Level B harassment, 14 exposures of potential slight injury, and one exposure of potential severe injury. While these exposures and injuries may not affect entire populations, they could have lethal affects on individuals over time by causing impairment to their eardrums that reduce their ability to feed or avoid predators.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The Navy feels the estimated "takes" (found on Table 3.9-12 of the Draft EIS/OEIS) are overestimates for numerous reasons, three of which are described below:  1) Where a range of density estimates existed, or where densities were seasonal, the modeling considered only the greatest density. This assumption leads to more animals within a sonar's range, and therefore

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		more takes.
		2) The modeling estimates do not consider the positive impacts of the Navy's mitigation measures. In reality, many of the estimated takes (primarily PTS and TTS) would be eliminated due to power down procedures in place as a marine mammal approaches a sonar source.  3) All surface ship sonars are modeled as the more powerful SQS-53C, when in reality 60% of all surface ship sonars have proposed are
		when in reality, 60% of all surface ship sonar hours proposed are significantly less powerful (225 dB compared to 235 dB of the SQS-53C).
Cameron-03	I am also concerned with the impact of sonar and explosives on commercial fish such as albacore tune and salmon, both of which must be maintained at sustainable levels in order to sustain coastal fishing economies. Salmon are	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
	also crucial to Northwest tribal economies and the ecology of coastal and inland watersheds. While our oceans may seem vast, we still know very little about our ocean systems. From what we do know, we can discern that these ecological systems are increasingly showing evidence of fragility; oceans systems are changing dramatically as they absorb more carbon and face increasing temperatures resulting from increased carbon levels in our environment. Increased vessel and aircraft activities only contribute more carbon to the atmospheric load.	All water pollution concerns of Navy actions are handled in Section 3.4; Water Resources. All concerns for air pollution are handled in Air Quality; Section 3.2 and Fish; Section 3.8. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Cameron-04	I encourage the U.S. Navy's NW Training Range Complex to take the following activities, no matter which alternative it ultimately pursues: • Manage all vessels to a "zero oil spill" policy; • Notify the U.S. Coast Guard of any loss of power or steering, or any other vessel casualty with potential grounding or collision implications that could result in an oil spill; •	Navy policies concerning oil spill prevention and shipboard emergency procedures go beyond the scope of this EIS/OEIS.
Cameron-05	Coordinate offshore activities with whale migrations along the California, Oregon, and Washington coasts, avoiding areas where such migrations are occurring; • Determine where resident pods of whales reside and avoid these areas; •	Seasonal and geographic restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Cameron-06	Coordinate with and avoid offshore and nearshore fisheries along the California, Oregon, and Washington coasts; •	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. The analysis concluded that the Navy's activities do not cause harm to fishing or fisheries. Therefore, avoiding these areas would not be justified.
Cameron-07	Coordinate with the California, Oregon, and Washington governors' offices as they work to develop territorial sea plans and marine protected areas; •	Coordination with State governments concerning territorial sea plans goes beyond the scope of this EIS/OEIS.
Cameron-08	Monitor the environmental impacts of training activities in order to generate more data for the models used in your next EIS for training activities; and •	The Navy, in cooperation with the National Marine Fisheries Service, is developing a monitoring plan for Navy activities in the Northwest Training Range Complex.
Cameron-09	Hold at least six public hearings in Oregon for future EISs: four on the coast (Astoria, Tillamook, Newport, and Coos Bay) and two in the Willamette Valley (Portland and Salem, where many persons live who also own coastal properties); and establish a comment deadline that is at least one month after the date of the last hearing. In summary, I support the "No Action" alternative,	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take
	combined with implementation of the management strategies recommended	2000 and tast majority of the mary o proposed details would take

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	above.	place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Camillieri	I live in Northern Ca., I hope the Training Range will include our area. If Oregon does not want your presence, move down to our area.	Thank you for your comment.
Campbell, C.	I oppose the testing in the sound and along the coast. It is ludicrous to think it will not be detrimental to the wildlife and subsequently, to us. We are poisoning all our basic fundamental elements and need to stop it now.	This comment has been duly noted.
Campbell, E.	This is feedback regarding expanding military training missions off the coast of oregon, Washington and Northern California. Please reduce or leave the same, the level of training missions and help maintain environmental integrity of the ocean. Thank you.	This comment has been duly noted.
Campbell, A01	Please EXTEND the comment period for 30 days beyond the March 11 deadline, so that more people can become informed of the Navy's intention and so that the following questions can be thoroughly answered.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Campbell, A02	1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year? 2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Campbell, A03	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Campbell, A04	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.
Campbell, A05	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website.	The Navy's primary jet fuel is JP-5.
Campbell, A06	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the

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		Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Campbell, A07	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Campbell, A08	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	The potential impacts of all chemicals used in the proposed activities are found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Campbell, A09	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
Campbell, A10	10 - How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Campbell, A11	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well. 12 - Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Campbell, A12	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military? A	No.

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	rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake along with the human health effects and dead marine life.	
Campbell, F.	The military industrial complex is massively out of control in this country. The freaky inventions for spying on citizens and so called "terrorists" are not making anyone in the world safer, and we are destroying our planet by undoing the citizens restrictions on the environmental damage caused all this "national security" crap. It is time to put some of what is left of our wealth into securing real peace in the world through intelligent diplomacy. Leave our suffering Hood Canal waters alone so they can recover, and stop increasing the militarization of our Puget Sound and Olympic Coastal and Juan de Fuca waterways. Please stop this insanity. It is not about "national security" at all. It is about an out of control defense department and lots of money for defense contractors.	This comment has been duly noted.
Campbell, J.	I am very much against using our Pacific coast, or any coast for that matter, for target practice. Our oceans are dying as it is. Wildlife is stressed by sonic testing, over fishing, and pollution. I sincerely hope this will not happen.	This comment has been duly noted.
Campbell, R.	DOD/Navy's attempts to expand its range of environmental impact in more ways than one may create some unanticipated collateral damage: those states affected by this state-sponsored environmental terrorism may use their constitutionally-based right to secede from an illegitimate empire that long ago seceded from them to commit in their name crimes against humanity and nature.	This comment has been duly noted.
Carlino-01	Dear Sir, Madam. The Washington Marine Sanctuary and relevant waters. I am deeply concerned about the use of Depleted Uranium in the home waters of the Puget Sound where we live. The toxicity of Depleted Uranium upon all mammals; from the human to marine, indeed, any living thing who imbibes it, breathes it, touches it, will die an awful death; children are particularly vulnerable. Our home sea beds will become toxic, they are the nursery of the world as will the food chain. This simboisis is a universal phenomenon and the impact of this material is manifold. For the Navy to even contemplate using this type of material anywhere in the Puget Sound, is criminal. The public to date has been duped by your lack of transparency in dealings with us. You are set on conducting military maneuvers with the latest weaponry and yet are relying on data - some of it thirty years old - to educate the public about the project! This is the height of cynicism. Please correct your plans regarding Depleted Uranium and do right by those you are aiming to protect. Thank you. Yours Truly, Jill Carlino	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of

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		236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Carlino-02	# The Washington Marine Sanctuary and Relevant Waters I am deeply concerned about the use of Depleted Uranium in the home waters of the Puget Sound where we live. The toxicity of Depleted Uranium upon all mammals; from the human to marine, indeed any living thing who imbibes it, breathes it, touches it, will die an awful death; children are particularly vulnerable. Our sea beds will become toxic; they are the nurseries of the world as will the food chain. This symbiosis is a universal phenomenon and the impact of this material is manifold. For the Navy to even contemplate using this type of material near residential coastlines and islands is criminal. The public to date has been duped by your lack of transparency in dealings with us. You are set on conducting military maneuvers with the latest weaponry and yet appear to be relying on data - some of it thirty years old to educate the public about the project! This is the height of cynicism and self interest. Please educate yourselves with current data on its pernicious effects upon civilians, before you use this material in your own country. Act transparently with the public to do right by those you are aiming to protect. Yours Truly Jill D. Carlino	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Carlson, A.	Please do not add any other chemicals to our already saturated environment, whether active or inert. Chemicals can be just as deadly as bombs. In our Valley just over the mountains from Seattle, cancer rates are soaring due to orchard sprays and other environmental toxins in the water we drink and the air we breathe. As an American citizen, born and bred, do not use my tax dollars in the way you propose!	This comment has been duly noted.
Carlson, M.	I LOVE THE NOISE PLEASE DO WHAT EVER IT TAKES TO BE WELL TRAINED TO PROTECT US1 THANKS FOR SERVING OUR NATION!	Thank you for your comment.

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Carmichael	The USA has the largest arsenal of nuclar weapons in the world. Enough nukes to destroy the planet several times over. There is no need for more weapons, training, or development of them.  That's all! Please, no expansions for war. Think Peace, that's what everybody - everybody - wants. Don't you?	This comment has been duly noted.
Carpenter	The Klamath River ecosystem including many federally listed fish species are in serious decline. Many groups have been working up and down the system, including off shore coastal zones, to improve their prospects, and the health of the watershed. Personally, I have spent over a decade on a Federal Advisory Group, the Upper Klamath Basin Working Group advising the Secretary of the Interior on resource issues. Please include these concerns in your scoping. Thank you, Jim Carpenter	This comment has been duly noted.
Carstens	PLEASE send me a copy of the EIS for the NW program to use nw area and population as training range nand guinea pigs complex. Thank you PS: Why	An electronic download of the Draft EIS/OEIS has been available on the website since December 29, 2008.
	is theren no public hearing in the state of Wash????	Three public hearings were held in the State of Washington. Please see Appendix F for a complete listing of hearings and notification efforts to publicize the hearings.
Casad-01	It appears from the EIS map the impact to the region surrounding The Strait of Juan de Fuca is limited to aircraft departing and arriving with actual action areas off the northwest U.S.A. coast and Eastern Washington state. If not, please advise.	That is correct.
Casad-02	While I appreciate the significant importance of your missions, I trust they can be accomplished so as to not overfly the San Juan Islands and other shoreline areas where there would be a resultant negative impact to wildlife and current peaceful environment. This can be accomplished by tightening traffic patterns and perhaps the Navy assigning someone to oversee pilots are being given and follow routes for approaches and departures over the center of The Strait of Juan de Fuca.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Overflight of the San Juan Islands is part of the NAS Whidbey Island airport traffic handling and is not covered in this EIS/OEIS.
Casad-03	My second concern is the impact of all the underwater operations such as mines mentioned in Alternative 2 and whether the impact to wild life (such as whale routes) has been evaluated.	All impacts to marine resources have been analyzed in Chapter 3 of the Draft EIS/OEIS. All of the proposed activities have been analyzed for their potential impacts to all resources areas.
Casad-04	It would be smart to have an impartial constant assessment of how your project is going and have its impact revaluated every 2 to 3 months, implementing necessary adjustments. I did not see any time limitation to your missions such as 6 month, one year etc.  Thank you for addressing the above concerns.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes and monitoring surveys for marine mammals by independent agencies (NMFS, USFWS, etc.) will likewise be conducted.
Cauffman	Your analysis indicates that several species of marine mammals could be exposed to impacts associated with underwater detonations and explosive ordnance use under the No-Action Alternative, Alternative 1, or Alternative 2 (Preferred Alternative) that could result in Level A or Level B harassment as defined by MMPA provisions that are applicable to the Navy (16 U.S.C.	Sonar activities occur occasionally and are short in duration and do not regularly occur in one area, therefore, chronic exposure to marine mammals is unlikely. Therefore, cumulative effects from these short duration exposures is not likely.

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	§§1361). Given the large number of exposures and the potential for cumulative effects that have not been addressed including the potential impacts on the survivability of these creatures, whose numbers have been dwindling under current conditions, I am dismayed not to see concerted and realistic attempts to mitigate these effects. The Navy needs to do better at sharing the sea with its inhabitants. Please defend them AND us!	
Cavness-01	I am saddened and shocked to learn that the Navy is planning to expand its maneuvers to the coasts of northern California. Disrupting sea life with sonar, explosions, etc. and engaging in target practice with depleted uranium bullets is analogous to criminal assaults on coastal inhabitants inclusive of animals, plants, and humans.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Cavness-02	If the Navy uses white phosphorous as a part of its off shore military exercises, there is no question that the wind will carry this poison onto the beautiful land of Mendocino County. The Geneva Convention bans the use of white phosphorous in warfare; please do not use this venomous substance within our civilian northwestern coastal environment.	White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Cavness-03	Additionally, California has several major fault lines, thereby increasing this geographical area's vulnerability to earthquakes. Setting off bombs in the ocean would further destabilize the already fragile fault lines and exacerbate the probability of setting off major earthquakes that will wreak catastrophic destruction throughout this northern state. The last thing the People of Mendocino County want is the Navy conducting military maneuvers off the northern California coastal region.	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
Cawdrey	I totally support the Navy training area. It is good for our environment, good for the economy, and great for our country's security. Thank you.	Thank you for your comment.
Ceccanti	I am against the increase of training activities in the Pacific Northwest Training Range Complex. This increase would perform irreversible damage to our environment and ecosystem.	This comment has been duly noted.
chambers	Didn't you get to blow up enough people, buildings, infrastructure in Iraq, Afghanistan, Pakistan and Syria to satisfy your training needs? Now you want to bring death and destruction to our coast so we will have the pleasure of finding more dead, bleeding from the ears whales and dolphins on our beaches? Do we want bomb, missile, mines and torpedo's off our coast?  I am sick and tired of our illegal, brutal "wars" and occupations, we do not want your war machine to be "training" off our coasts.	This comment has been duly noted.

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	Our fishermen don't want your bombs, missiles, torpedo's and missiles blowing up their livelihood.  We don't want any more dead marine animals, victims of this "training" on our beaches.  Why not do your "training" off the coast of Israel so they can get a taste of what they have been doing to the Palestinians for decades and get a real close up view of Americas war machine.  Weapons of mass destruction seems to be all we produce these days, everything else is a product of communist China.  Keep your war training off OUR COASTS!	
Chapin	Please register my position against the SONAR and violent underwater explosions. They are hazards for marine life near Washington shores, in a marine sanctuary no less. It is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).  Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."  (i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:  (A) Hull integrity tests and other deep water tests;  (B) Live firing of guns, missiles, torpedoes, and chaff;  (C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and
		(D) Anti-submarine warfare operations.
Chaplin-01	This proposal to expand the firing range for the Navy caught me by surprise. Why don't the citizens know about this? "Newly authorized naval training activities would include extensive air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures (including underwater "training" minefields), intelligence, surveillance and reconnaissance operations and extensive unmanned aerial systems operations (i.e., drones), in an area of ocean from the coastline to beyond the 12-mile territorial limit.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Chaplin-02	During its activities in these waters the Navy could prohibit entry into its training or exercise area. The excuse for pre-empting commercial fishing, tourism, surfing, sports fishing and boating over the entire Pacific Northwest coastline is "national security." The public needs to know the full and true impact of this proposal before going forward. Thanks	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of

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		negatively affecting the fishing industry.
Chapman-01	I strongly oppose any and all military training activities off the Oregon Coast. This area is home to many dwindling species of animals and also a place my family and friends spend time for peace and quiet. Why not train somewhere else?	Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Chapman-02	Why not put strong restrictions on your activities?	Mitigation measures are used by the Navy and are described in Chapter 5 of the Draft EIS/OEIS.
Charkowski	I oppose any navy weapons testing off the Mendocino coast and the coast all the way to Washington. This will harm sea life and cause disruptions of whale migrations due to sonar damaging their hearing and causing them to beach themselves. I also object to the testing of drone aircraft. Too much taxpayer money is spent on weapons while schools are starved for funds. Also, five term US congressman Mike Thompson representing the first California district from Del Norte to Sonoma has come out in opposition to the US Navy's expansion of the Northwest Training Complex. His announcement on the KZYX and Z evening news on Friday, March 6 came as a result of a strongly worded letter of concern from Mendocino County supervisors dated that same day. The letter, passed by unanimous resolution on a motion March 3 by supervisor McCowen and signed by third district supervisor John Pinches as chair calls for extension ot public comment on the draft Environmental Impact Statement until April 11, in concert with the Oregon Congressional delegations. The letter was copied to US elected officials in California, Oregon and Washington. Thompson said in the radio interview just 5 days before the close of public comment: "I am opposed to what the Navy is trying to do unless they can prove it's not going to be a problem for the fisheries." The Democrat legislator, who is routinely reelected with more than 60% of the vote in Mendocino County and the district is a fierce protector of commercial and sport fishing industries which bring substantial revenues into the North Coast. Thompson vowed to involve fishing organizations in a confidential dailogue he promised to initiate soon with the Navy, and cited the Mendocino County resolution as a catalyst for initiating higher level talks to determine the fate of the project. He agreed the public comment deadline should be extended past Tuesday "to make sure we have ample time to examine the impacts of the project." Stop the assault on our coastline! We have already been threatened with oil dril	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Charlier-01	Hello. First off, I don't think that listing 'Organization' as a required field on your form is appropriate. Can't individuals submit their own comments without representing an organization?	The Navy agrees, and based on comments received during the beginning of the comment period this feature was changed during the public comment period.
Charlier-02	Secondly, the period of time you have allowed for public comment on this proposal seems woefully inadequate for proper consideration of changes which could deeply impact our collective well-being. This has been	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
	compounded by problems accessing your comment form due to website problems. I hardly think that extending the comment period by one additional	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the

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	day addresses this.	original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Charlier-03	Having said this, I would like to give my support to the No Action Alternative in the Northwest Testing Range Compexies Draft EIS.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Charlier-04	There is already documented evidence that male members of the orca pods which inhabit the area included in the NTRC are dying at unprecidented and alarming rates. The protections outlined in the expansion proposal are inadequate, and if any changes are to be made, it should be in the direction of FEWER activites in this habitat, both commercial and military, not increased activities.	There is no indication that any of the Navy's current or proposed activities have any connection with the health of any marine mammal population. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Charlier-05	I am also concerned about the impact of current, and possible future activities, on the quality of seafood we obtain from this area. Documented toxic chemicals such as mercury that we are currently ingesting from consuming these food products are already being linked to health concerns with pathological outcomes.	Please refer to Sections 3.3, 3.4, 3.7, and 3.16 of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed.
Charlier-06	I think that the military should be helping to protect and preserve our well-being and habitat; not contributing to its destruction. The Navy has done a wonderful job protecting us from potential threats from foreign powers; thank you. This said, it is critical that current and future actions toward this end include non-destructive, environmentally-friendly training policies.	This comment has been duly noted.
Charlier-07	For the record, I oppose the Navy's testing of depleted uranium weapons anywhere, oppose the use of underwater tests that might damage the hearing/well-being of whales and other aquatic life, oppose invasive testing of any kind in an underwater sanctuary, oppose testing of any kind without independent environmental impact research, and oppose testing without viable citizen oversight of environmental compliance.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers

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		of the document.  The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Charlier-08	I hope that future generations will be able see the U.S. Military of our time as a leader in environmental protection, preservation, and beautification of our natural resources toward the well-being and enjoyment of all, and this requires constructive intervention, not potentially destructive and unnecessary expansion of current training activities in already fragile ecosystems.  Thank you for your kind attention, and Best Wishes towards successful leadership which will truly protect the long-term interests of America's citizens our human family beyond our country's borders.  Sincerely, Rev. Sura Charlier	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Charnley	I fully support this comment bellow and require of my government more interaction with the people who are this nation. A healthy environment and working on peaceful action in the world should be far more important then military destruction. "The Northwest  Training Range Complex plan should not be approved till the public have been fully informed about it e.g., until multiple public hearings have been held about it, in all of the states and counties within range of it, and all the questions at http://www.newswithviews.com/Peterson/rosalind114.htm are answered, to the public. "Please fully publicize answers to all of those questions, organize many more public hearings in all the areas involved, and extend the public comment period beyond those hearings. I've so far met only 2 people who've heard of this plan. If that is the Navy's intention, it's not government by the people for the people."	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6).  Six public hearings were held, in Washington, Oregon, and Northern California. Please see Appendix F for a complete listing of hearings and notification efforts to publicize the hearings.
Chastain	I am writing to state my opposition to underwater testing off our prestine shores. It will impact the underwater spesies as well as change the ecosystem that helps create a healthy planet, No underwater testing now or ever, How about testing ways to create a healthy planet without war? How about evolving? STOP NOW! You are not wanted here!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Chickman	Whoa! I just learned about this EIS and proposal. I need more time to review and comment. Please extend the comment period. Thank you for your consideration.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Cholerton	To Whom It May Concern: As a concerned citizen and Navy veteran (Vietnam Era), I have to join with other Americans who are voicing their opposition to areas of the Pacific Northwest including the states of Washington, Oregon and California which collectively may be adversely	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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	impacted environmentally by exercises of the U.S. Navy involving technology that is still subject to additional research as for use in weapons systems. Whereas it is understood that any less than adequately understood research program, and especially one that's appearing as comprehensive as has been reported, will have its share of NIMBYs. I would request that further time be allocated to allow for a full disclosure for public awareness be permitted. Personally, for any new and unproven technology that needs environmental testing, let that be done over 200 miles from the continental United States, and preferably not adjacent to the above named states. Thank you for your attention. Eric Cholerton Santa Paula, California	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Christensen, E.	Of the so called 'choices' presented, I would not to see The No Action Alternative enacted. I do not believe it wise to subject Americans to potential negative side effects of increase military activity within their own countries territory.	This comment has been duly noted.
Christensen, G.	Do NOT enlarge this training areaI have a better idea, I want this training area abolished. The Constitution identifies the legitimate military that is ALLOWED and the US Navy does not need this facility at all. We need a defensive Navy not one that promotes war for the benefit of the armament industries.  Cut the size of all our military drastically so the politicans can no longer misuse it to start more conflicts.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Christian-01	I think this would be a grave mistake, there are many alternative places/methods for doing this kind of experimentation and training. The sanctuaries of the pacific northwest are delicate and extremely important for marine research. I grew up enjoying these waters and the life therein and I would love to see it preserved for my kids to experience the same way. Please take extreme measures to avoid the certain damage caused by the Navy's intentions for the Northwest.	This comment has been duly noted.
Christian-02	I think this would be a grave mistake, there are many alternative places/methods for doing this kind of experimentation and training. The sanctuaries of the pacific northwest are delicate and extremely important for marine research. I grew up enjoying these waters and the life therein and I would love to see it preserved for my kids to experience the same way. Please stop the plans for increased Naval training in Puget Sound.	This comment has been duly noted.
Ciancutti	This is a request to withdraw and or change your plans to have testing off of our coast. We know from previous testing that sea life cannot endure sonar testing techniques. Our economy of Mendocino is totally dependent on tourism. Tourist who come here mainly for the ecological health and beauty of this coastline -beached sea life will bankrupt us. Please consider an alternative location to your training location. Thank you Francesca	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.

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Cicotte	Stay out of the East Bay!	This comment has been duly noted.
Cicotti	I am an Integative Health Practitioner practicing on Lopez Island. It is most disturbing to me that there is considerationtion to increase air traffic and flight drills over my place of practice and residence. The noise is often such that when on the telephone, conversation in side a closed dwelling is interrupted by by the noise overhead created by the air traffic of these fighter planes. I chose to live and practice in a quiet peaceful setting. My clients come to receive this tranquility which is greatly disturbed by the noise pollution that I presumed was not allowed and just over sighted out of priviledged negligence. I am not generally a complainer but the thought of increased number and range of flights and flight patterns here would have an increased impact on the health and wellbeing of my clients, my practice and livelihood. Peace and quiet is a major economic value of San Juan County. Visitors from all over the country and the world come to visit our beautiful archipelago and enjoy the geologic, geographic and biological diversity.  They usually leave feeling that they have taken a breather from the pace of the rest of the world. They do not come or stay or spend their tourist dollars to experience a war zone.  We already have a significant amount of military noise in the San Juans. To imagine 4 times the noise and double the takeoffs and landings (from 2300 to 4500) is unacceptable!!!!!!!!!!!!!! Right now NAS Whidbey's noise is a daily impact. The roar and vibration from arrivals and departures is heard all over the south end of Lopez Island nearly every day. EA6-B's fly regularly over our school, Lopez Village and our homes. Overflights often disregard the 3000 foot ceiling they are mandated to fly. It is common for flights to be directed far into the county over the north end of Lopez and beyond during busy arrival schedules or weather. Carrier Landing Practice often goes into the midnight hours.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Clark, C.	I am opposed to the proposed action for range enhancement within the Northwest Training Range. I would prefer less action, but could support The No Action Alternative. In these economic times of hardship, we do not need to spend money or have enhancements that affect the pocketbook and the environment.	This comment has been duly noted.
Clark, H.	I request an extention the period of public comment and publicized notification of this extension of the training range.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Clark, R.	Please do not expand the training range down the coastline to California.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to

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		continue training in the same area as they have since World War II.
Clark-Shim-01	We are writing to object to the Navy's plans for future range management operations and activities in the Northwest Training Range Complex. We are not experts in all the issues, but we are uncomfortable with the Navy's poor	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	public outreach and short comment period. We understand that the Navy EIS states they can mitigate toxic usage of chemicals but fails to disclose a complete listing of said chemicals. The US military does not have a fine record of environmental stewardship. We demand a fuller accounting and an extended comment period to vet the Navy's claims.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Clark-Shim-02	The draft EIS does not fully address the potential environmental impacts on multiple resources, like air quality, water resources, airborne acoustic	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below.
	environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety. Without a complete understanding of their programs it is impossible to determine any impacts. We understand that the Nevada Test Site and/or Area 51 could be used for some of the Navy's proposed tests. We recommend such tests be continued in existing remote test sites where the environmental impact is less risky and likely to be smaller. Portions of the above are excerpts from online resources.	Section 3.2 Air Quality Section 3.4 Water Resources Section 3.5 Acoustic Environment (Airborne) Section 3.11 Terrestrial Biological Resources Section 3.16 Public Safety
		The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Clements	I support the NO ACTION ALTERNATIVE. Thank you, Susan	This comment has been duly noted.
Clere	I do not want to see ANY testing of weapons, sonar etc What else to do these people need to know? We already posses a huge arsenal of conventional, biological and nuclear weapons This is just more INSANITY!!!! STOP IT RIGHT NOW!!!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Clubbe	Bad Idea Enough of the military show. Please clean up your mess and go home.	This comment has been duly noted.
Cochrane	I am concerned about the effects of sonar on Orcas, and depleted uranium on the ocean floor. I do not want Puget Sound turned into a war zone.	This comment has been duly noted.
Cole, A.	It's time to focus on lifein our oceans and on our land. Life is sacred. The force behind the war-machine culture is ending now. The focus of this century is life and compassionate connection. Are you able to revise your thinking? We are.	This comment has been duly noted.
Cole, Barton-01	I am PROFOUNDLY concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine SANCTUARY. Does the Department of Defense have an alternative definition of "sanctuary"?	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.

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Cole, Barton-02	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which ends up on the plates of citizens of many countries, including the United States – does the Department of Defense continue to disregard the "pursuit of happiness," as they did to the citizens downwind of Hanford?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Cole, Barton-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Cole, Barton-04	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Cole, Barton-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Cole, Barton-06	Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	All of the information mentioned in the comment is provided in the Draft EIS/OEIS.
Cole, Barton-07	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	NEPA does not require the funding of new and independent research; however, an independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea

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		Turtle Density Estimates for the Pacific Northwest Study Area.)
Cole, Barton-08	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Cole, Barton-09	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Cole, Barton-10	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that "most, if not all, of
		little or no impact upon major water bodies."

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		during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Cole, Barton-11	Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary. The fearmongers (Bush, Cheney, Rumsfeld, et al) have been sent to the wilderness – let's send their policies and arrogant disregard for the citizens of our own country, and of the world, to the same wilderness.	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Cole, Brian	You must stop the insane murdering of sea mammals. They really are sentient beings. Please wake up and value life forms that are not trying to harm you in any way. You can discount this comment as coming from a nutjob environmentalist but I am just a dad from the burbs that knows that killing defenseless animals is INSANE.	It must be acknowledged that ASW activities have been conducted without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy ASW operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.
Cole, E.	I do not support the Navy's attempts and am sad that people don't understand what it means to preserve and maintain quality of life here in this region (or any other). I only support the preservation and protection of the environment and country as an integral part of quality of life which support the livelihood andlifestyle of people living here through through sustainable agriculture, fishing. Living in a clean environment is a key ingredient towards living in a healthy environment. If people do not protect the environment that makes life possible and valuable in this country than WE HAVE NOT DONE OUR JOB IN SUPPORTING THE CITIZENS WHO HAVE A BASIC RIGHT to a healthy and well preserved environment. In other words what do we have to defend if we destroy the very thing which makes life meaningful? I think this plan is not only shortsighted but counter-productive and creates more unnecessary strife for the citizens that reside here. Polluting the ocean and harming its habitats is not protecting the citizens of this countryit is harming them and their future. It is essential to protect the environment as we all depend on the environment for a healthy existnce, primarly, if you cannot come up with innovative ways of doing this, then what do you have to defend? Nothing. I have faith and trust that our country will seriously reexamine this issue and reconsider what is means to protect and preserve quality of life by not introducing this into our oceans and instead introducing plans to clean our oceans and re-introduce a healthier habitat in ways that are sustainable for the benefit of the environment and the people who rely upon it for exisitence. Supporting a sustainable healthy environment should be the primary focus in protecting the rights and freedom of people living	This comment has been duly noted.

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	here.	
Colorado	Don't practice War here	This comment has been duly noted.
Cone	I request the comment period for this proposal be extended due to the length of the EIS and the lack of distribution of the EIS. In addition the public has not adequately been made aware of this proposal and given time to read and respond to the EIS and the proposal itself. I am very much opposed to this proposal. We are at a time when we need to dedcate our financial resources to the economic recovery of our Country and need to cut back on military spending.  Regardless of claims to the contrary, this will cost money. Also our relationship with the rest of the World cannot continue to be based on military coercion. WE are the Rogue Nation in the world view.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Conley	The thought that we should again be subjected to the unbearable noise conditions of more than a decade ago, is truly shocking. Until a refueling accident landed a piece of equipment on an Orca+E564s Island Farm, bringing a halt to the worst abuses, we might as well have lived under the LAX flight-path. These island's economies are heavily tourist dependent, and already struggling, so WHY would we welcome returning to the super noisy past? I understand that LOPEZ Island is already worst off.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
Conn	I am writing to let you know that I strongly object to the Navy's plan to do sonar testing and detonate underwater bombs in Puget Sound and the Coast of the Northwest. These practices are known to cause serious detriment and death to endangered Whales and other marine life. The health of our marine ecosystem is more important than developing new technologies for war.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Connors-Kellgren	The environmental effects of allowing the Northwest Training Range to expand and have more training of different kinds here seems like too large a price. Not to mention the possible effects on human being that would happen.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
COPELAND	THE PEOPLE OF OREGON MUST HAVE MORE TIME AND INFORMATION BEFORE THIS IS ACTED ON, THIS HAS MANY RAMIFICAYIONS AND SHOULD NOT BE SHOVED DOWN OUR THROATS WITH NO NOTICE TO SPEAK OF.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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Cordova, J.	Please respect the peace and quiet of the environment and of the citizens of San Juan County!!  When your jets fly over our homes it rattles our windows and we have to pause in a conversation because of the noise level!!  Our children are terrorized by the jets, knowing they are WAR machines!!  We do not feel any safer by these overhead flights, instead, it is a horrible feeling of disrespect by our own government towards the civilian community!!	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
Cordova, M01	I object to the establishment or expansion of training ranges. Please restrict such complexes from the California coast and other sensitive areas.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Cordova, M02	We demand a REDUCTION of these exercises immediately!!	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration.
Coren	No!! I do not want this training range. I am worried about the environmental impact. There has been no time to study the potentially horrible result of this program. Stop!	This comment has been duly noted.
Cornwell	I do not support the proposed expansion (to include all of Washington and Oregon states as well as portions of the states of Idaho and California and portions of the Pacific Ocean) of the Northwest Training Range as indicated in the EIS release in December 2008.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Cort	Our endangered orcas and the other marine mammals that inhabit the Salish Sea need your consideration. It has been proven that testing is detrimental to their health and ours. Please, please do not test in these waters. Do the RIGHT thing!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Cowan	To whom it may concern:  As a concerned citizen of Humboldt County on the North Coast of California, I plead with you, please do not build this new training range complex.  Even though you plan to stay away from protected areas multitudes of people will be effected by its environmental impacts. The missles and mines cannot be good for the marine life which in turn effects the multitudes of people who interact with the ocean on a regular basis. We want our seafood to be safe and available not only for ourselves but for future generations. In addition, many people use the ocean for recreation such as sea kyaking and surfing. Beside the direct effects on humans are indirect effects. When wildlife and plant-life of the sea die, whole biosystems are effected which in turn reduce our animal populations and air quality on land.  Please listen to me and my fellow Americans who say please do not build this training complex in the Pacific Northwest. Thank you.  Sincerely,	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include building or expanding the range complex, but to continue training in the same area as they have since World War II.

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	Kristen Cowan	
Coy	Please do not expand/increase the testing of weapons by the Navy off the coast of Oregon/Northern California. The economy is fading quickly here and any more threats or injury to the fishing and sealife would be problematic. Thank you	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Crane	I'M AGAINST THE UPCOMING N.W.TRAINING RANGE COMPLEX USE OF EXPLOSIVES AND TOXIC CHEMICALS WITH THEIR TESTS IN PUGET SOUND. I DO NOT THINK THAT EXPOSING THE SOUND AND THE MARINE SPECIES TO MORE HARDSHIPS IS WHAT WE REALLY NEED. PEOPLE DUMP TRASH AND TOXIC MATERIALS ON LAND, TANKERS AND OTHER BOATS LEAK OIL INTO THE PUGET SOUND WATERS (THESE ILLEGAL ACTS ARE WELL KNOWN AND PROSECUTED) AND YOU WANT TO DO VIRTUALLY THE SOME THING UNDER WATER.!!! IN THE NAME OF NATIONAL SECURITY, OR MAYBE YOUR JOB SECURITY, OR MAYBE SOME TRUMPED UP CLASSIFIED/SECRET REASON? I'M NOT BUYING IT!! THEN, EVEN IF YOUR ALLOWED TO DO THIS TESTING, YOU HAVE NOT INCLUDED OTHER PROFESSIONALS, SUCH AS , MARINE BIOLOGISTS TO HELP MONITOR ENDANGERED SPECIES AND HELP PREVENT FURTHER DAMAGE TO THEM AND THEIR ENVIRONMENT. I THINK THE PRESIDENT'S PROMISE OF "TRANSPARENCY" EVEN APPLYS HERE.WAKE UP!! WE HAVE NEW PRIORITIES AND ETHICS. DO THE RIGHT THING FOR PUGET SOUND!!!! JOHN R.CRANE	Please see Page 3.3-10; Hazardous Materials and Wastes for the results of recent studies conducted by the Northwest Fisheries Science Center (NOAA) concerning the current level of military expended material on the ocean floor and the minimal impact the Navy makes through pollutants being leaked and dumped in the waters of the NWTRC.
Crawford	Please de-escalate the over airspace training and flying maneuvors happening in San Juan Islands. It feels like a war zone area. The birds and wildlife behavior is very sketchy when this is happening. People are getting "ON EDGE" because of the noise and pollution from the jets. Also the tremendous waste of natural resources this is drawing from. The birds and wildlife are disappearing, they are not returning or they are burned out on the noise and pollution. They are not multiplying or not able to sustain their number hence they are becoming extinct. The jets are flying at all hours day or night. It seems training is going on at the whim of some selfish military. There are many alternatives to training over the san Juan Islands however and this area is not essential. Perhaps it is only a matter of convenience and that is outrageous. They are not doing it 100% for the defense of our country, they are increasingly doing it to burn budget money so that they can get an increase funding the war efforts. The war needs of our people are to protect "ALL" the world from terrorists. The jets and war machine equipment is decreasingly necessarry. There is a greater need to educate people, so diverting these moneies to education is more effecient. So please train excellent educators and employ them in important anti terrorist areas. Protect the "Freedom Way" not necessarily the "Selfish Way". The military is famous for producing abstruse documentation to increase their status. The old military is becomming obsolete. Please present these ideas to your board meeting and talk about responsibly dealing with the progression of life and	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.

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	protected environment for raising children and all living creatures. The military need to focus on serving human needs and preserving dignity rather than increasing their own collective ego. The increases in spending and war exercises are beyond obsolete. We need to take care to treat the root of the problems in our world. Why not, we own it!	
Crocker-01	We are shocked. We urge the following:  1. Adopt the NO ACTION ALTERNATIVE to the NW Testing Range Comp. Draft.	This comment has been duly noted.
Crocker-02	2. No military testing for any kind in any marine sanctuaries.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Crocker-01	3. No testing involving depleted uranium anywhere in the oceans.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Crocker-02	No testing of sonar in coastal waters.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
Crosman	More time and more transparency (make that FULL transparency) is needed before the navy and DOE can make the NW into their target practice area for whatever they are aiming to do. The public is entitled to have a say, to know what is going on, why it is being done and what the full objective is behind these tests. I do not wish myself or the public at large to be your guinea pig in these tests without knowing what you are going to do and how we will be effected. I am flatly opposed to marine life being negatively impacted by this testing, in particular sonor testing. It is already heavily imperiled in many ways at present. Why compound an already tenuous situation? I am flatly opposed to our general environment being used for the testing of unspecified chemicals, the techniques and motives behind this testing being presently unavailable to the public. Full disclosure with a strong emphasis on clarity on what is proposed and why this is the right of all citizens under the Freedom of Information Act. You DO NOT have my or our permission to act on this without first addressing ALL the issues involved. You may not run roughshod over us and sidestep public scrutiny of your actions. Allowing us time a reasonable length of time to consider your proposal is not requested. It is demanded. The deadline for consideration must be extended to allow the public to be fully informed to consider such an action.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The FOIA request is handled separately from this document. We are responding to comments on the EIS/OEIS here.
		The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.
		The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
		The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the

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		original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Crummett	no bombing ot sonar military testing in the northwest!!	This comment has been duly noted.
Culhane	I am in total opposition to the following plan for California, Oregon or any other state in the US  We are not the enemy. Do not destroy the quality of our environment and our lives by using us as part of any warfare test!  UNITED STATES NAVY ^ DEPARTMENT OF DEFENSE - ENVIRONMENTAL IMPACT STUDY PLAN TO USE PUBLIC LANDS, WATER RESOURCES & HUMANS AS WARFARE TEST GUINEA PIGS	This comment has been duly noted.
Cull	Is the Navy just ignorant of or just dosent give a dam about the whale migratory route along the california coast? As an American citizen i am embarrassed by what appears to be careless consideration of marine life on the part of the United States Navy in their desire to carry out dangerous sonar trails along this migratory route. Come on guys we have the entire fing pacific ocean and i know that you can track whales. So just tell us in detail how you are planning to avoid killing whales. You have killed so many already one would think that you would have learned how not to by now. So be American and be marine friendly.BC	This comment has been duly noted.
Cunningham	Dear Sir/Madam; I would like to comment on the plans for expanding Navy Training in our area.  1) I am strongly against all plans for expansion, on many levels. This is an area well known for its beauty, quiet, natural resources and quality of life. All of these positives will be severely and negatively impacted by any expansion of training.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Cunningham-01	2) Additionally, the Navy has NOT provided enough time for comment or public awareness of their plans. Please extend the comment period and provide additional public meetings so that more people will become aware of the details.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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Cunningham-02	3) I am concerned about the negative impacts on our marine resources. Orcas, salmon, and other sea life will all pay a dear price for additional testing. We simply cannot afford to continually put these irreplaceable resources at risk. The entire Puget Sound basin as well as the coastal waters are dependent on a strong marine ecosystem. By damaging any of	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
	the marine life here, you damage the entire structure. The EIS/OEIS does not effectively address the damage that WILL be done by more testing.	Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.
		The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
		The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Cunningham-03	4) Additionally, the bird life will be negatively impacted by the increased noise and activity. Habitat areas will be destroyed.	The complete analysis of potential impacts to birds is found in Section 3.10 of the Draft EIS/OEIS.
Cunningham-04	5) Historic lands will most certainly be damaged and can never be returned. Whidbey Island and the surrounding lands are full of history, cultural resources and to impact this area is to destroy a piece of history and American culture that cannot be replaced.	Cultural resources have been analyzed within Section 3.12. All treaties with Native American Nations have been complied with concerning training within the NWTRC.
Cunningham-05	6) Noise pollution from takeoffs and landings at the Coupeville OLF is negatively impacting our town, our livelihood and our quality of life. Additional training at this and other facilities will only increase the noise levels. This is unacceptable. Please do not increase training levels. Please listen to the community members and realize that Whidbey Island is a treasure not to be wasted. Thank you, Sue Cunningham	The proposed action of this EIS/OEIS does not include NAS Whidbey Island or OLF Coupeville takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Cunningham-06	As President of the Central Whidbey Chamber of Commerce, I would like to voice the objection of the Chamber to the expansion of the NW Training Range Complex. The Puget Sound area and the Washington coastlines are fragile; additional training in these areas will only be detrimental. Please reconsider. Do not increase military activity in the NW.	This comment has been duly noted.
Curley, Jayme	Protect our oceans as living ecosystems populated by sentient creatures. No bombing; No sonar. We can find other ways to be safe than by testing our weapons with no regard for other life forms on earth.	This comment has been duly noted.
Curley, Jonathan	I am against the expansion of the Northwest Training Range Complex, The impact on our fragile marine ecosystems would be devastating.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Curry	I'm an American citizen who loves my country and values all that our armed forces do to protect us. However, I would rather be less safe than see this testing program go forward. Please do NOT go forward with the proposed testing. Our marine life is already too compromised and this testing will cause	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
	testing. Our manne life is already too compromised and this testing will cause	The proposed action calls for continued training of Navy personnel with

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	more damage.	established weapons systems, similar to what has been conducted in this same area since World War II.
Cyr-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine sanctuary, no less, and I emphasize the word sanctuary.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Cyr-02	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, bad enough in itself, but some of it people eat, even worse.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Cyr-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Analysis of heavy metals is discussed under Section 3.3.1.1 – Hazardous Materials.
Cyr-04	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS (Deepwater Benthic Habitats beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern
		recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.

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Cyr-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible. The impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information is nothing but reckless with the only Earth we have.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Cyr-06	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Cyr-07	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Cyr-08	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas would surely be compromised. In general, it is the height of contradiction to assert that warpractice activities are compatible with the purposes of a marine sanctuary. Practice for war makes war more likely. And this particular war-practice is monumentally destructive. Please: NO. Thanks, Susan M. Cyr, M.A.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that

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		uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Dach	I am surprised that the Dept. of Defense and the Navy would be so lax in their concern for environmental damage that will occur with the proposed activities in the Northwest area. I am totally opposed to activities that MAY harm the population of the Northwest as well as harming whales, dolphins and other sea and land animal life forms. Aerial spraying of any weather modification materials or any other chemicals or materials over the Pacific Ocean or the land areas of the Pacific Northwest must not occur. Use of depleted armaments should also not occur. There have got to be more acceptable alternatives to these activities than what is being proposed.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  There has been no study of weather modification materials within this EIS/OEIS because it is not a potential effect.
Daencer-01	I am opposed to continued testing by the navy of "various" missiles, etc in the waters of our precious Pacific. The obvious intrusion to the eco system sends rippling damage across the sea to "life forms", therefore to us, humans. The damages and dangers must be explored, exposed, to put a stop to the violations going on now and those proposed for the future.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Daencer-02	I am opposed to the navy testing in the Pacific on the North Coast. The habitat is at stake. all is in a fragile way. Please listen to the people and stay out of the waters. thank you. rose daencer	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Dagres	I live on the south end of Lopez Island and have called the Navy's noise complaint line NUMEROUS times when these flight operations have been going on well into the late night and early morning. There has never been any response or reduction in the late night flights. I am adamantly opposed to any increase in the number of training exercises.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan
		Islands.
Dahlen	As a former Viet Nam era Marine Aviator (F-4 Phantom) I say the range should go ahead. The more you sweat during Peace time, the less you bleed in War! Jet Noise! The sound of Freedom.	Thank you for your comment.

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Dahlgren	I'm against this proposal and hope most other writers to this web site are too. Just today I returned from a visit to the central Oregon coast to see the migrating whales, and cannot support plans that could be disruptive to these creatures and the many others in the Pacific.	This comment has been duly noted.
Dailey-Deaton	I strongly urge the government to reconsider any training, testing and development that would effect the welfare of the people, plants, animals of the Great Northwest. We are very proud of our strong and supportive environmental policy, and hope to better care for our land and water with policies and regulations that would protect our ecosphere and all of the native and indigenous species that inhabit it, as well as protect the health and well being of the tax paying citizens of this beautiful land. I do not believe the United States Navy has good intentions with our natural environment, and public health. Please reconsider any plans that might endanger the aforementioned people, plants and animals. Thank you kindly, Sincerely, Kathryn Dailey-Deaton	This comment has been duly noted.
Dale-01	I am in favor of the No Action Alternative in the Northwest Testing Range Compexies Draft EIS, *(which would prevent the expansion of this testing program – the other two proposed alternatives would expand testing.)	This comment has been duly noted.
Dale-02	2) I oppose the Navy's testing of depleted uranium weapons anywhere at anytime. These are toxic small-scale nuclear devices. Stop using them now. They are toxic to all life.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Dale-03	I oppose the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them;	This comment has been duly noted.
Dale-04	4) I oppose invasive testing of any kind in a underwater sanctuary; 5) I oppose testing of any kind without independent environmental impact research; and 6) I oppose testing without viable citizen oversight of environmental compliance.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Dale-05	7) I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems – as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.  Sincerely, John-Henry Dale	This comment has been duly noted.

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D'Almeida	I disagree with expanding any activities that might compromise the Puget Sound ecosystem any further. Although I only moved to Whidbey Island 3 years ago, in speaking to many long-time residents, the abundance of salmon, crabs, shrimp, eagles and other species is greatly diminished in the area. Your increased activities will only worsen the situation. Please stop your armaments testing, use of new sonar devices, and tidal turbines.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Daloz	Relationships between the Whidbey Island citizenry and the Navy are generally positive. This activity, however, poses the danger of harming tourism by damaging the wildlife and pristine quality of the adjacent waters. This, in turn, threatens both the wildlife itself and the tourist trade that is of such economic importance to the island economy—especially in these difficult times. To argue that these activities are necessary because they are less expensive ignores the very significant costs they will cause to island tourism. Those costs can only result in erosion of the positive public image of the Navy here. That can lead to less willingness to support military appropriations. We strongly urge you to revise your plans, particularly as they affect fragile or relatively pristine coastlines.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Daniels	I ABSOLUTELY PROTEST THE INVASION OF THE NAVY FOR TRAINING OR ANY, ANY, ANY OTHER PROJECT OF DISTRUCTION AND FALSE/DARK REASONS OF ILL, CARELESS USE OF OUR CALIFORNIA (OR ANY) COASTLINES!!! YOU DO NOT NEED TO KILL AND DISTROY TO TRAIN TO KILL AND DISTROY FOR THE PURPOSES OF KILLING AND DISTROYING.  WAKE UP AND OPEN YOUR HEARTS!	This comment has been duly noted.
Dannhauer-01	I support the No Action Alternative. I am concerned about the potential adverse environmental effects of the expanded activities. The sonar will likely affect the orcas and other marine mammals. Sonar is known to damage the ears of orcas and can result in death. I am also concerned that underwater detonations could constitute harassment of whales protected by the ESA. Your EIS indicates that there is no data on hearing for many whale species.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Dannhauer-02	I am concerned about the effects of depleted uranium and other heavy metals and toxins released into the marine environment. I am not sure there is much knowledge regarding the bioavailablity of DU in this situation.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that
		members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Dannhauer-03	In regard to the orcas, there is not much room for error - they are nearly extinct. There are also too many other health and safety concerns to warrant proceeding with the planned activities.	Public Health and Safety concerns are analyzed in Section 3.16 of the Draft EIS/OEIS.
Darrigo	DO NOT disperse radioactivity including from so-called "depleted" uranium into the environment. Isolate it from the environment and protect the ecosystem.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Darsie	Reports from doctors, including oncologists, in Iraq indicate there may be a link between depleted uranium (DU) and cancer and birth defects in children. There has been some anecdotal reports that indicate there may be a	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of

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	connection between exposure to DU and birth defects in the children of soldiers returning from Iraq. The draft EIS indicates that DU began being phased out by the Navy in 1989 and was being replaced by other materials such as tungsten. 1) When will the phaseout of DU be complete? 2) What studies are being conducted to determine the effects of exposure to DU on sea life?	training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Davey, G.	I support the Navy 100% in their efforts for the NorthWest Training Range Complex and related activities. I live in Tillamook County in the unincorporated area of Oceanside, and urge the Navy to keep its historical training in the Northwest Training Range and exand as is needed.	Thank you for your comment.
Davey, M.	I support the Navy's continued and expanded use of the NorthWest Trainging Range Complex for official US Navy training.	Thank you for your comment.
Davidek-Waller-01	The Northwest Coast in an inappropriate area for the Navy to test weaponry and conduct other activities that would in any way endanger the health and habitat of humans and other species.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Davidek-Waller-02	There are large metropolitan areas in reach of pollutants and important fisheries and endangered species that are at risk. The Navy has a very poor environmental and health and safety record and cannot be trusted to operate in this region. I object the strongest terms to going forward with this plan or any modification that would create the same concerns we see here.	This comment has been duly noted.
Davis, L.	The expansion of the naval practice zones will have dyer consequences on the state of our marine life, which is already balancing on a thread. The result of damaged oceans due to the neglect of the environment by major businesses is an issue already present, but the specific effects of sonar/radar usage on whale health is horrificBy all reasonable stats/standards the only activity that should be taking place in our local ocean should be aid given to the already hurt ecosystem.  Put quite simply: They should just do their business elsewhere.  I would like to give a special thanks to KGW for focusing on this issue. This is a very important and I only wish to see an increase in attention of this issue as to build public awareness before it is too late.  Sincerely,  Lequisha Davis	This comment has been duly noted.
Davis, V.	I'm not even going to bother to ask you to reconsider using the Northwest as a bombing range. I'm sure there would be no point in that - especially since I heard in a presentation by Thomas P.M. Barnett that the Navy isn't even American any more.  The globalized navy operates under the auspices of the United Nations and	This comment has been duly noted.
	the criminal syndicate of the multinational corporations.  You should remove "United States" from your name. You've become the Blue Hat Navy - navy of the United Nations. Obviously this plan you have to	

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	use the Northwest as a training range is a thinly veiled excuse to bomb us out of our homes for the United Nations rewilding project.	
	But it would be too much to expect honesty from you. Why would you be honest when nobody else in this government and country are honest.	
Dawes	Although I recognize the importance of training exercises and testing of sonar equipment, I feel that the risk to an already environmentally sensitive area and many marine species is too great to warrant this activity in the Puget Sound area. Please adopt the no action alternative to protect this environment and the wildlife that depends on these waters for their survival.	This comment has been duly noted.
Dawson	Your propaganda states that Navy testing is safe, studied and careful. Your track record states a different story. Injury to whales alone from your sonar is enough to warrant protest from Oregon citizens. We have a Grey Whale migratory route off our coastline, near and far depending on the season. The very nature of your business is death and destruction, we do not want you here. There is no safe place for marine life when the Navy is testing. It is one thing to agravate the people of Oregon with your jets, explosions and pollution. To further stress and cause fatal results to the marine ecosystem, already at risk from human-caused and environmental degradation is dispicable. We do not want you in Oregon, stay away with your poison, explosions, pollution and sonar testing.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Day	War practice activities in a marine sanctuary that supplies food and recreation to thousands of people seems a careless, dangerous practice that could conceiveably cause more harm than benefit the the people who live in the NW and our nation as a whole. Much more study needs to be done before such reckless testing is allowed. Also please explain why more "war games" are necessary when we are trying to promote global peace. I will await your reply. Sincerely Emily Day, the wife of former navy pilot Michael J Flanagan, who is also appalled by this threat to the health of Puget Sound and its human and animal inhabitants.	The purpose and the need for the proposed action is fully explained in Chapter 1 of the Draft EIS/OEIS.
De Meurichy, L.	I am opposed to the near shore training zones. This is a pristine and highly productive fishing and recreation part of the Pacific Ocean. Military training is and always has been devastating to the natural environment . Please do not destroy what little we have left.	Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California. Also, no training involving live explosives take place within 3 nm of shore. The Final EIS/OEIS has been revised in several places to make that point clear.
De Meurichy, P.	I am against the near shore training. We are in a decline of our ocean use (fishing and recreation) at this time by marine reserves and wave energy projects. This is also disruptive to the environment and the living creatures of the oceans. Please do not disrupt what productive areas that are left.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Dean	I powerfully protest ANY more naval or military training. Please, it's time to use our precious resources for building life, not destroying it. Thank you.	This comment has been duly noted.

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DeBacker-01	Personally, I would rather the Navy not have a Northwest Training Range Complex off the Oregon, Washington & California coastline. I am extremely concerned on the adverse effects such a Training Complex would have on the environment and most importantly on the wildlife that live in this area.	This comment has been duly noted.
DeBacker-02	I am strongly against the use of sonar for the damage that it does to wildlife.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
DeBacker-03	I am also concerned about the effects of depleted uranium use on the environment. Please consider other areas for your facility and please look into changing your existing practices, such as sonar, for the sake of the wildlife that also call this planet home. Thank you for listening.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Dellisanti	I am quite concerned about the testing the Navy will be doing off the coast of Whidbey Island. The northwest is a rich eco-system, which we delight in. This includes our marine life, quality of water, our forests, and preservation of the integrity of our resources. PLEASE DO NOT DESTROY THIS!!!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Delmar	I am opposed to any expansion of Naval training or testing in the waters of the Pacific Northwest. Sonar from expanded Naval activity would endanger Orcas and other marine mammals already threatened from many sources. They do not need this additional hazard. Please, do not expand testing or training areas in our waters.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
DeMatteo	The Mendocino coastline remains one of the most pristine areas in California. Many locals and tourists come to the ocean for peace of mind, rejuvenation, and inspiration. And visitors have been coming here for years, to get away from their busy lives, to experience rare beauty and nature. Tourism is our main industry at this time. We love our grey whale migration and fish. What you are planning would destroy this beauty and our way of life. Please don't do that.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.

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DeMoll	STOP Your training "exercises" which will kill marine mammals and other ocean life. Please utilize your NO ACTION ALTERNATIVE and extend the citizen comment period. I own and operate a business of whale and wildlife watching on the Oregon Coast. Folks from around the world come to watch whales. And your "exercised" will kill the whales and kill a major economic resource from Mexico to Alaska. I was appalled at the ignorance of the Navy staff at the Newport, Oregon "citizen input" meeting. He acted as if he did not know whales resided and migrated in this area. So, my concern was heighten that this ignorance will be guiding the Navy.  Please proceed with your NO ACTION Alternative. I welcome any Navy personnel to travel to Baja, Mexico and meet the whales in their birhting lagoons then determine if these are creatures you have determine should be killed. Read: Whales: Touching the Mystery by Doug Thompson who demostrates the economics of ecotourism which we need.  Please do not give the rest of the world another reason to hate the United States of America.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Demorest-01	I am writing to protest the Navy's Proposal to greatly increase training activities in the so-called "Pacific Northwest Training Range Complex". This area is the habitat of three threatened salmon species, nine ESA-listed marine mammal speciesincluding orcas, sea otters, and several whales, more than 70 bird species, and untold numbers of other creatures. If the Navy's plan is implemented, these activities will intensify the level of noise, violent explosions, and hazardous materials released into our already beleaguered seas. Pollutants that will be expended in the proposed exercises include a variety of heavy metals and chemicals such as depleted uranium, lead,mercury, and perchlorate.	All impacts to marine, avian, and terrestrial resources have been analyzed in Chapter 3 of the Draft EIS/OEIS. All of the proposed activities have been analyzed for their potential impacts to all resources areas.
Demorest-02	Included in the plan is an escalation of the use of active sonar, which has been undeniably implicated in marine mammal injuries and deaths.  Conservationists have worked too long and hard to preserve these things to sanction your endless war games and wantonly destroy the habitat of these precious creatures who share this earth with us.  Though I am only one person, I belong to and support a number of environmental organizations and will notify all that can be reached by email of this proposal that constitutes an environmentally irresponsible action. You should be receiving a number of responses from them as well.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
DeRigo	Please Stop this unhealthy and UNFair military practice!!!!!! WE do NOT support this!!!!!	This comment has been duly noted.
Deseck-Piazzon-01	I am young and I want something to look forward to when I get married, have a family and live in this state. When we are told there will be little impact that is often not true. Dump this project!	This comment has been duly noted.
Deseck-Piazzon-02	STOP this project. Our coastlines need protection not military experimentation. Come up with a better idea that does not hold our planet hostage. We need progressive thinking and planning as they do in the EU,	This comment has been duly noted.

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	not last century mind sets. Get those think tanks thinking!	
DeVincent-01	I am writing to document my opposition to any increase in more Military Action Off the NW Pacific Coast. If anything, training activity of this nature should be decreased. These are the reasons why I believe this to be the case. 1. The US Military already spends more on it's defense than all the other nations in the world combined! This is a horrifying figure that all future expenditures should be measured against.	The purpose and the need for the proposed action is fully explained in Chapter 1 of the Draft EIS/OEIS.
DeVincent-02	2. There is no current threat to this nation that warrants this kind of increase in military action off the NW Pacific Coast. 3. The use of ELF and other "active" radar has proved harmful to sea mammals, and some of these species are already endangered. There is no threat to this nation to justify the use of such a weapon or detection system as to justify the indiscriminate loss of threatened species, or other species as well. 4. At a time when our nation	The global proliferation of extremely quiet submarines poses a critical threat to the maritime interests of our military alliances and allies. The military use of sonar, and the ability to test and train with it, is critical to U.S. operational readiness and our national defense. Indeed, the national security interests of many nations require that naval forces be able to train with, test, and employ active sonar.
	is being crippled by endless wars and other economic travesties, we should be scaling back on the kind of training activities that use single use expenditures, like bombs and explosives.	Military training now is critical to ensure preparedness should our forces be called into action. We cannot in good conscience send American men and women into potential trouble spots without adequate training to defend themselves.
DeVincent-03	5. If you want to train soldiers closer to home, then simply don't send them so far away. Cut back on the kinds of training that uses excessive amounts of travel.	One of the reasons stated in the Draft EIS/OEIS for training in the NWTRC is to reduce travel as suggested by the comment.
DeVincent-04	6. Given the fault lines along the Pacific Coast, is it really wise to be dropping major bombs and exposives and sending out unnatural sound waves near our coasts?	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
DeVincent-05	7. It appears the Navy can afford to spend millions on PR campaigns to brand it's activities as examples of Environmental Stewards, as it did on the website where comments were supposed to be taken. During the Bush years the Navy spent considerable energy fighting challenges to it's unchecked power to circumvent the Marine Mammals Protection Act. We must fight this kind of publicly funded propaganda designed to support increases in military activitity and be aware of it when considering questions such as these.	This comment has been duly noted.
DeVincent-06	8. Over 50% of every tax dollars goes to support the military, which is all too often used to support corporations, where greed works against the best interest of this nation, it's inhabitants and the world. Any increase in military activity off this coast is not the best interest of anyone except weapons manufacturers.	This comment has been duly noted.
DeVincent-07	9. Increases of some radar activities have a much greater chance of harming the Sound and our ocean, the creatures in our ocean, which are some of our greatest resources, than helping them. It's time to start saying no to military escalation, both at home and abroad. It is time to stop inflicting violence whenever and wherever to whomever and whatever and forever. Our own	This comment has been duly noted.

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	unchecked belligerence is the biggest threat we face and it's time we faced that threat and say no to more military action in the Pacific!	
Dewell	Your NEPA process document on this web site shows that the Notice of Intent was issued July 31, 2007. That must have been preceded by many months of planning. So after 17 months or more of preparation, you (only after appeal) are allowing the public less than 3 months to deal with a 1,000+ page EIS which fails to address a myriad of issues important to the citizens who will be impacted by extending the mock war zone as is planned. It also appears many of our representatives were also not properly informed and your public affairs efforts to notify the public were also less than sterling. Please extend the public hearing time to the end of 2009 so that we have as much time to consider this as you did. Don't forget, the US Navy works FOR the people of this country; not the other way around.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Diepenbrock	I am overwhelmed with concern regarding the proposed Navy testing off the Mendocino Coast, particularly regarding underwater explosives and sonar. the effect on the Gray Whale migration could be disastrous. Will we EVER get our priorities whereby the respect for all Life is the determining consideration?????	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Diggins	Please stop doing anything in Puget Sound that is harmful to Whales or any other mammals. Please listen to the biologists who attempting to save these mamals.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
DiLabio-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
DiLabio-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the

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	eat.	Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
DiLabio-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Analysis of heavy metals is discussed under Section 3.3.1.1 – Hazardous Materials.
DiLabio-04	It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science
DiLabio-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
DiLabio-06	3) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
DiLabio-07	Other points I feel need addressing are these: 4) There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of	All of the information mentioned in the comment is provided in the Draft EIS/OEIS.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight

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	new systems that so far lack essential public information.	testing of unmanned aerial systems is proposed.
DiLabio-08	5) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	NEPA does not require the funding of new and independent research; however, an independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. Seasonal data, where available, was considered in this study. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
DiLabio-09	6) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
DiLabio-10	7) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
DiLabio-11	8) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."  Gena DiLabio	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are

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		minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Dilling-01	Attn: Mrs. Kimberly Kler - NWTRC EIS/OEIS 16 February 09 Greetings: Moments ago I was informed of NAS Whidbey's to double the training activities departing from NAS Whidbey. I find it stunning that in your comprehensive EIS planning process you have neglected to inform or request comments from San Juan County government and residents.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
	The noise "footprint" from current 2008-2009 activities is very significant. To imagine 2 times the number of aircraft arriving and departing and practicing carrier landing practice into the midnight hours is alarming. Right now NAS Whidbey's noise is a daily impact. The roar from arrivals and departures is heard all over the south end of Lopez Island nearly every day. EA6-B's fly regularly over our school, Lopez Village and our homes. Overflights often disregard the 3000 foot ceiling they are mandated to fly. It is common for flights to be directed far into the county over the north end of Lopez and beyond during busy arrival schedules or weather. We often feel we are living in a war zone.	
	The proposed noise footprint from your alternative two suggests roughly four times the current noise level and when runway 31(?) is in use it would be pointed directly at us and appears to reach into San Juan County. Have you neglected to inform us because we are a small population?	
	Or perhaps you are imagining that the many wild life refuges and preserves along the southern border of the archipelago are of no consequence.	
	I respect your commitment to carrying out your mission. I ask that you respect your commitment to working with surrounding communities and request that your extend your comment period for one month to allow the residents of San Juan County to understand and comment on your proposals. Your current time frame appears to be trying to slip a very significant regional decision past the residents who will be most impacted.	
	Sincerely, Cynthia Dilling	

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	612 Cape Saint Mary Road Lopez Island, WA 98261 360-468-3251	
Dilling-02	I would choose the "no Action" alternative for the NW Range Complex proposed expansion of training for NAS Whidbey. The EIS for this proposal is being pushed through without comprehensive notification of the public. The lack of notification has been pathetic.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Dilling-03	I strongly question the need to replace Prowlers with F-18 Growlers and doubt whether this program is even needed. If implemented it will create a war zone out of some of the most pristine places in three states. Regarding the low level training areas in Eastern Washington: Four years ago I met a retired Navy captain and asked about the effectiveness of flying at extremely low altitudes in our Cascade Mountains and the Okanogan. He said that it wasn't really needed anymore but it's "too dang much fun and would be a shame to take it away from the boys". So we are all spending money on an aviation disneyland. Almost every Eastern Washington resident has a harrowing tale of a Whidbey jet screaming through the mountains, flying inverted or actually flying under bridges.	The Navy's decision to replace aircraft is beyond the scope of this EIS/OEIS. The analysis in this EIS is limited to the potential impacts of training conducted by the EA-18G as it replaces the EA-6B Prowler.  Military Training Routes (MTRs), used for the low-level flight training described in the comment, exist across the United States, and in Washington. Aircraft flying along these MTRs are likely the issue described in this comment. These training routes are not Navy routes and are neither part of the Northwest Training Range Complex nor the proposed action of this EIS/OEIS.
Dilling-04	There are many unanswered questions surrounding the NW Range Complex expansion. Questions regarding who will really be effected, what kinds of pollution (NOISE, CHEMICAL, RESIDUE FROM THE WEAPONS) will be generated and, of course, will this new program really contribute to our safety. This proposed expansion should be set aside until our country has moved beyond the current financial crisis. Given the new directions and the reestablishment of diplomatic contacts around the world, threats to the U.S. may change and military needs may shift.	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Dillon	I welcome the Navy to train off our coast. It would be good to see the ships and aircraft out there, but I know the water's too shallow for blue water training. Train hard so you don't bleed in war. Put your time out there to good use. The nation is counting on you.	Thank you for your comment.
Dimock-01	I am an ecologist. I have also done graduate studies in oceanography. My oceanography graduate project dealt with the ocean off the Oregon Coast. I am also a war veteran.  I have read about your proposal. It is well known that the mid-level and high frequency sonar causes marine mammal deaths. Sonic boom caused by EA-18G Growler would have an unfavorable impact on land animals, including humans, as well. Unmanned aerial systems present a hazard. Having air and sea surface targets would certainly be destructive to the environment. It appears to me that the ecological impact would be entirely negative. Much of it would be seriously negative.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.

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Dimock-02	There is also economic loss, as there is bound to be an effect on commercial fishing. There could be significant losses in real estate values, too. If the coast becomes undesirable for recreation there would be losses from that, as well.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS. Section 3.14. Impacts to fisheries have been analyzed within Section 3.7, Fish.
Dimock-03	It seems to me that the Navy intends to destroy much of what it was founded to protect.  Why weren't we given a chance to attend a public hearing where questions and answers were permitted? As an ecologist I have questions about your perspective on the ecological impact and the effect on the environment. Why wasn't the tiny public hearing that you did have advertised throughout Oregon?	Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Dimock-04	I first learned of the Navy's proposal to begin trainings off the coast of Oregon on February 3rd. I was notified by one of the very few people who attended the hearing on the central coast. They had read about the hearing in a small paper in Lincoln City only a few days prior to that.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Dimock-05	No one has notified anyone on the Southern Coast or on the interior. This is a very devious way of doing business. To obtain public input the public must be informed.  I am sure that this is being done as the Navy is aware that there will be a high level of resistance to the project. And, resistance there should be.  During WWII the Navy moved into the area around San Francisco Bay. They claimed that they needed the bases for the war effort and would only be present for the duration. I suppose people should have asked "duration of what?"  The last thing the Coast of Oregon or Washinton need is to have training activities occuring off shore. This is particularly true of near shore activities. The use of Sonar would have devastating effects on the migrating whales.	The proposed activities take place in and over Washington, and in the Pacific Ocean off the coast of Washington, Oregon, and Northern California. Very few activities take place annually off the Oregon coast, and those occur far out to sea. No activities occur in or over Oregon or its territorial seas.
Dimock-06	The presence of Super-sonic jets would disturb the land animals (including people).	Supersonic flight occurs only over water under specific conditions, designed to preclude sonic booms from disturbing people and animals on land.
Dimock-07	Futhermore, the presence of mine field and military ships and subs would not help an already struggling fishing industry.  The purpose of the Navy is to keep americans safe. Please do so by staying out of the Oregon and Washinton Coasts.	The non-explosive training minefield location has not yet been determined, but will require additional environmental analysis and coordination with the commercial fishing industry before it is installed. The specific environmental impacts of the installation are beyond the scope of the NWTRC EIS/OEIS, but will be covered in the additional analysis.
Divelbess	I strongly disapprove of the Navy's plan to increase Pacific coast training use of "depleted" uranium munitions, underwater explosions and sonar. This practice can not help but have harmful effects on our marine environment and our human health.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in

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		Section 3.3.1.1.7.
Dixon-01	organized. There was only one public hearing in Oregon and it was only	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	Oregon lives in the valley, not on the coast and while we may not live there, our coast is very important to us. The fact that I only heard about this plan through a grassroots movement to get the word out is absurd. I would appreciate a little more consideration from the Navy when it is making decisions about where I live, work, and play.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.
	decisions about where i live, work, and play.	Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Dixon-02	I am also concerned about the increased use of mid-level sonar in our waters. The Oregon coast is home to some species of endangered marine mammals that use sonar to communicate and navigate. I do not believe your environmental impact statement fully takes into account the effect your operations could have on marine mammals. Many experts have stated that sonar use is very harmful to marine mammals so I would appreciate more consideration of that concern.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Dobbins	In response to your plans to double your training exercises here my household has to protest. Your planes are noisy enough when they are out over the water on a proper flight path, but when they stray over our house and street—it is already too much.  Do NOT increase your flights here. Do NOT harass our wildlife or people any more than you already do. You need our support!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Dobson-01	I am concerned about the effect of the Navy's proposed plans on our local marine species. Many of these species are suffering a decline in numbers; particularly the orcas. There seems to be a lack of current information available to assess the impacts of the Navy's proposed expansion on these species.  I support the need to maintain military readiness through training, but I recommend that the "no Action Alternative (maintaining existing training levels) be the course of action until the Navy funds independent research on the seasonal presence of marine fish, birds and mammals found within their training ranges. The Navy must not rely on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Dobson-02	In addition, the Navy needs to provide public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations especially important for orcas.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Dodd	I wish, under the Freedom of Information Act to view the chemical list of the NWTraining Range Complex Environment Impact State ment, I am not only concerned with health hazards to people, but to the animal populations on	Please refer to the Section 3.3 – Hazardous Materials, of the Draft EIS/OEIS for the hazardous materials involved in the proposed activities. Document requests under FOIA is handled separately from the NEPA

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	the west coast as well.  Please honor my request ASAP,  Sincerely Gloria Dodd DVM	process.
Doherty, A.	I am a Portland Resident. I am opposed to any increase in weapons testing of any kind.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Doherty, C.	We are a business that provides recreational experiences in the San Juan Islands. Increased jet noise and fly-overs woud have a negative impact on our business. The San Juan Islands are a popular tourist destination and tourism is an essential part of our economy. Frequent jet noise is not compatible with the tourism economy here in the San Juan Islands.  As a high school graduate of the Lopez School district, I remember the teachers having to stop class and wait as the jets would fly over, rattling the windows and making conversation impossible. We islanders are tolerant to a point, but increased jet noise decreases the quality of life for us.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Domeier-01	I am entirely against the testing of depleted uranium weapons anywhere. I am entirely against sonar testing that can be so damaging to marine wildlife.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Domeier-02	There should environmental impact studies before flagrantly imposing on the homes of our brothers and sisters of the sea, potentially destroying their/our ecosystems, disturbing their lives and potentially damaging their hearing.  There should also be citizen oversight.  I would want our government to be protecting our fragile marine system, not going in and treating it like a playfield for a testing ground.	The Navy is completing this environmental impact statement (EIS) to analyze the potential impacts to the human environment. Public input is an important part of the EIS process.
Domenech	Our waters and our marine wildlife are in enough danger from the current levels of pollution. National security and preparing for possible future wars are not good enough reasons to further imperil our endangered wildlife and further pollute, both with noise and chemicals, our waters. Our way of life here in the Northwest depends on the health of our ecosystem. I do not believe that your proposal can possibly help promote a healthy ecosystem.	This comment has been duly noted.

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Donatuto-01	I am concerned about the use of sonar at Northwest Training Range Complex and its harmful effects to marine mammals.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Donatuto-02	While I understand that the Navy finds the use of sonar an integral part of its training and duty, I believe that some safety measures ought to be put in place. Necessary safety measures include putting rich marine mammal habitat off-limits; avoiding migration routes and feeding or breeding areas when marine mammals are present; and turning off active sonar when marine mammals and endangered species are spotted near by. Thank you.	The mitigation measures (safety measures) described in the comment are discussed in Chapter 5 – Mitigation, of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Seasonal and geographic restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Dossett	I am writing in regard to extend Navy jet/prop flight operations over San Juan County. Several years ago, Vancouver B.C. wanted to extend their Class B airspace over SJC for aircraft approaching Victoria airport located near Sidney B.C However, Canada backed off infriging upon U.S. airspace and limited Vancouver Class B airspace to the northerly boundary of San Juan County. Allowing Navy flights over the SJC could interfer with commercial aircraft approaching and leaving Victoria airspace. However, I'm sure the Navy has been in contact with CAA authorities about possible airflight infringements. San Juan County's environment is an endangered area in regard to loud noise interferring with Orca whales, the people of the county, and the general welfare our wildlife in this area. The Navy has operated their aircraft away from San Juan County for over 50 years or more. There is no official need to infringe Navy aircraft noice in the islands now. During the summer months, private aircraft flying to and from the islands increae to 12,000 or more. Adding the element of Navy aircraft in the area will cause concern for possible inflight collisions with Navy aircraft. The Navy should restrict all of their aircraft operations outside the boundary of San Juan County. Sincerely, Paul Dossett	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Draper-01	Simply put, I decline to be impressed or influenced by the information on your website some of which has made its way into the mainstream media, i.e., The Oregonian newspaper.  In this, the 21st century, I don't believe the Navy needs to expand its use of the NW Pacific ocean, specifically near the Oregon, Washington, and Calif. coastlines for so-called training exercises, etc.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Draper-02	War games, really, are what you are playing. Isn't there a video version you could come up with utilizing all of your vast resources and manpowerone which won't impact the ocean beds, life, and ecosystems?	Regarding the use of simulation, as described in Section 2.3.2.2 of the Draft EIS/OEIS, "Unlike live training, simulated training does not provide the requisite level of realism necessary to attain combat readiness, and

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	If not, then it is time you put your energies into that instead of expanding your so-called training activities over an Ocean expanse which needs to be preserved and protected from activities such as those proposed on this (your) website www.nwtrangecomplexeis.com. Invoking security and protection from terrorism is a ruse, really, especially when Ports and inland waterways remain vulnerable to actual terrorist activity.  I, along with many other Oregonians and Americans, have decided not to be bamboozled and b.s.'d by the Military, and in this case, the Navy.  Please make all of these comments part of the official record.	cannot replicate the high-stress environment encountered during combat operations. Aviation simulation has provided valuable training for aircrews in specific limited training situations. However, the numerous variables that affect the outcome of any given training flight cannot be simulated with a high degree of fidelity. Landing practice and in-flight refueling are two examples of flight training missions that aircraft simulators cannot effectively replicate."
Dubois	The NW Training Complex is a valuable and necessary asset for realistic training for all branched of the military. It is important to the citizens of the entire country. The location of air, land and marine training in the Puget Sound area is cost effective use of military resources. The Navy also conducts environmental stewardship programs to help maintain the ecosystem.	Thank you for your comment.
Duffy	Hi: I tried to send you my comment and all I got was an error message. I tried resending and got another error message. Fortunately I had copied my message and left your site then tried to paste my text in and I was unable to do this. Please send me an email as to how I can send my comment to you at:peoplenplants@gmail.com. Thanks, Melissa	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Dunn	You have no right to do dangerous testing on any American soil. Desist immediately and do not attempt to do any again.	This comment has been duly noted.
Duthweiler	Hello, I am very concerned about the Navy's plan to increase training in the Northwest Training Range Complex. The training creates high levels of pollution and I believe there are negative effects on marine life. This type of training should be kept at a bare minimum.	This comment has been duly noted.
Duty	The report is woefully shy on detils. I would like to know EXACTLY what you intend to do and what chemical exposure will be encountered. You mention none of the chemicals except to tell us they are safe. I know better. Explosive accelerants are very toxic and taint water supplies as you well know. Will there be Perchlorate use? We live here for the peace and quiet and the pristine nature of the environment and I do not approve of this type of exercise as it has no valid purpose. Go test your war skills at Area 51 or on some uninhabited island but you will not be welcome here. We will conduct our own testing after your intrusion if you do not feel compelled to be forthcoming about your actions and the chemical exposures. We are not your enemies and we do not want your presence. We are not lab rats.	Chapter 2 of the Draft EIS/OEIS lists all the activities proposed to be conducted.  Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the resources listed below. All potential hazardous materials used in the proposed action are described. Section 3.3 Hazardous materials  Section 3.4 Water Resources
DuVernay-01	The Training Range Complex is a very bad idea in my opinion. It can already be determined that such an action will negatively affect marine and terrestrial life (a horrible concept as Humboldt has a university dedicated to helping the	This comment has been duly noted.

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	environment).	
DuVernay-02	Increased boat and air traffic could also add to these unkind actions. If there is any where else that this rang can be placed, please put it there GIVEN that marine and terrestrial life are not negatively affected.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Dziak	I am research scientist specializing in ocean acoustic research. I am concerned about the acoustic source levels reported in the EIS report. Levels of 232 dB have been stated for the MFA sonar, which is comparable to seafloor earthquake source levels and could be damaging to marine mammals and various commercial fisheries. There is a discrepancy in the report which says the sonar would be active for periods of 1-1.5 hours, while at the meeting it was stated active periods would only be a few seconds. Shorter durations would be less likely cause damage to marine ecosystems. Lastly I would like to know the frequency range of the sonar (this may be in the report, but I did not see it) to better address which animals might be more or less affected by the sonar.	The statement in the Draft EIS/OEIS about sonar being used 1 – 1.5 hours during each use was accurate. The comment made during the public meeting may have been addressing the ping cycle of the surface ship sonars. Typically, a single ping from a Navy sonar is approximately one to two seconds, then the sonar is silent. In this respect, the "active period" would only be a few seconds. This sonar may ping only twice like this each minute of use.  Active sonars used by the Navy in the NWTRC vary, but fall into two broad categories; mid-frequency (1-10 kHz), and high frequency (>10 kHz to 100 kHz).
Dzurella	I am writing in behalf of the creatures in the ocean that enter or permanently live in the proposed sonobouys system area. The wide spread local areas that will be changed by this decision, a large section of the west coast of the United States, would come under significant change in habitat. As long recognized, habitat destruction is a major disrupting force in any species fight for survival. Recently, other studies conclude that the sounds that humans create in their daily routines deleteriously affect all land-based species to some extent. These studies have shown that feeding, mating and communicating are disrupted. It has been show by another study that the effect on marine mammals of the proposed system has long lasting and in some cases permanent consequences (EPA CEQ # 20080495). Once disabled, these individuals will become less attuned to their environment. Inappropriate behavior thus becomes threatening to that individual. Rare and /or localized species could be heavily impacted. The near shore environment would be especially at risk due to higher concentration of life forms per square mile of project area.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California.
Eades	I am supportive of the military, and appreciate the need for the air crews to be able to train. As a general aviation pilot, I am concerned over the possible impacts regarding my access to NAS Whidbey air space, and interactions between myself and military aircraft in the adjacent military operating areas. Overall, I welcome the increased activity in the area.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Eaton-01	Will this involve weather modification testing using aircraft?	Weather modification testing is not part of this EIS/OEIS.
Eaton-02	What is the current test site perimeter? I just received notice of this in an E-mail.	The range complex consists of two general areas; the offshore area and the inshore area.

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		The Offshore Area of the Range Complex include surface and subsurface operating areas extending generally west from the coastline of Northern California, Oregon, and Washington for a distance of approximately 250 nm (463 km) into international waters.
		The Inshore Area includes all air, land, sea, and undersea ranges and OPAREAs inland of the coastline and including Puget Sound. All of the Inshore Area is within the State of Washington.
Eaton-03	Why wasn't this widely broadcast in local newspapers, etc?	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Eaton-04	I fear purchasers will avoid an area being used as a testing site for war purposes. I know I would.  Please reply to my fears. Thank you.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
Eaves	Please I hope the Navy won't be discouraged by all the "letters to the editors" in the local paper about the planes & the noise. I've lived on this island for over 12 years and proud that the Navy is here. I am also a Navy vet and my wife is a retiree. We are very proud to know that the Navy and the city of Oak Harbor have been very good neighbors, working together.	Thank you for your comment.
	These people who want to sell or develop their property & complaining about the Navy, who is going to buy the developed property if the Navy & all the people who are supported by having the base here leaves? Wal-Mart & other retailer would have to shut their doors if the community lost the military & their families. We would be moving to another state who supports the military & it's important role in Freedom.	
	I think most in the community are very happy to have the base here as it is. Let's not change it.	
Ebaugh	I am all for testing and having the biggest baddest weapons etc, but are you people out of your [expletive deleted] minds? I am no eco nut by any figment of the imagination. However, I do believe in responsibility and the concept of cause and effect. This action of killing off 5 species needs to be rethought. How do you know you will limit it to just 5? What will the collateral damage be? What will the effect on the eco system be as a whole? Bad plan.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either A or B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death.
		Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Ebersole	I am concerned about the economic and public health dimensions of this project, and propose the civilian use of the environment, not the military abuse of sea, land, air resources. Specifically, I feel that public funds (tax payer funds) would be best invested, in non-military projects. Such projects can better provide job development (according to Pentagon studies, among other sources), and can promote domestic human rights; human rights summarized in the Universal Declaration of Human Rights (Articles 24/25), and the International Convenent on Cultural, Social, Economic Human Rights	This comment has been duly noted.

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	(both customary international law). The risks of the Training Range to the natural environment are also significant. The public health can best be affirmed by non-military production including by refusing to produce a Training (testing?) Range that by definition prepares to destroy and harm, not resolve conflicts by diplomacy, and non-authoritarian methods like discussion, and cultural exchanges. I suggest alternatives to any Training (testing?) Range be fully implemented.	
Eckert	I have great concern about the northwest training range complex. This is a very diverse area with several species of threatened and endangered animals. We already have problems with whales beaching themselves, dead zones depleted of oxygen, and severe pollution that is human related and these are just a few issues. Also all weather patterns for the west coast pass through the areas listed for the range complex. This will enivitably disperse pollutants from military use into and over the coastal and inland areas putting public safety at risk. I find it impossible to conduct military operations as listed in the northwest training range complex with-out having adverse affects on OUR environment and ask that this area be dismissed from use for any military operations.	This comment has been duly noted.
Edain	At this point I'm simply testing the system, since so many people have reported difficulties. I would appreciate acknowledgement of receipt of this test. I believe it is important that there be alternative methods to submit comments. Given the level of interest/concern, having received only 40 comments to date demonstrates that the system is dysfunctional. Please offer us an alternative method of commenting.	Comments to the Draft EIS were accepted as written comments that could be handed in during any public hearing or mailed in, oral comments taken at each public hearing, and website comments, through which over 1,400 individuals provided comments.
Edgar, P.	the current flight pattern over Skagit Bay and emanating from Oak Harbor Airforce Base is already disruptive. If more flights are included it will negatively impact an area known for a quiet, peaceful quality of life. It is also disruptive to the bird's and wildlife. It is my hope that no more flights will be added.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Edgar, R01	I would like to challenge a number of issues that the Draft EIS does not fully explain. The only logical conclusion is that the U.S. Navy and the U.S. Department of Defense want to hide the negative impacts to the citizens living in the Northwest Training Range Complex.  The draft EIS does not fully address the potential environmental impacts on multiple resources, like air quality, water resources, airborne acoustic environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety. By listing only a few of the EPA list of toxic chemicals that will be released by military aircraft (like jet fuel emissions), the Navy is avoiding any discussion of negative impacts on air and water quality. These negative impacts need to be included in the Final EIS.	Please refer to the following sections of the Draft EIS/OEIS for the complete environmental impacts on the multiple resources listed below. Section 3.2 Air Quality Section 3.4 Water Resources Section 3.5 Acoustic Environment (Airborne) Section 3.11 Terrestrial Biological Resources Section 3.16 Public Safety
Edgar, R02	There is a short listing of hazardous materials, air pollutants, and pollutants from munitions, expended materials, and radioactive materials to be used in this project. Inshore and offshore detonations may or may not be considered	The potential impacts of all hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.

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	hazardous - however, until a complete listing of these chemicals is provided to the public there can be no public discussion of their hazard to public health, marine life, wildlife, public drinking water sources or our oceans. The avoidance of making this specific list public leads one to believe that these hazardous materials and chemicals are toxic and do pose environmental hazards. A complete listing of these chemicals needs to be included in the Final EIS.	
Edgar, R03	Table ES-5 Summary of Effects (Page ES-16) - Hazardous Material does not list the name of any hazardous materials but tells the public that there is no problem with their use. Materials are purposely labeled "hazardous" specifically because there is a problem with their use. The Final EIS needs to identify the hazardous materials to be used, the human populations to be affected and the mitigation that will be used to protect humans from exposure.	The information found in the Executive Summary only summarizes the complete analysis that is described in Section 3.3 of the Draft EIS/OEIS.
Edgar, R04	The public and marine life in the ocean will be subjected to various sonar and aviation noise, target noise, surface ship noise, weapons and target noise, EOD (no definition found), and underwater explosions. The Final EIS needs to include a better explanation of the long-term effects of such prolonged exposure to public and marine life.	The U.S. Navy has conducted underwater detonations training and midfrequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The full analysis of potential impacts to marine life and the public is found throughout Chapter 3 of the Draft EIS/OEIS.
Edgar, R05	The EIS does not state how long the testing process will last. This needs to be included in the Final EIS.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Edgar, R06	How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? What are the cumulative and the synergistic effects of all the chemicals on human health? These questions need to be answered in the Final EIS.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Edgar, R07	There are too many items being withheld from the Environmental Impact Statement which strongly suggests that the Northwest Training Range Complex will knowingly negatively impact the environment and population of Washington, Oregon, California and Idaho. This should be sufficient cause to stop the implementation of this program.	This comment has been duly noted.
Eicher	Please do not permit the Navy to declare the Pacific Northwest from Cape	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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	Mendocino to the Puget Sound in Washington and east to Idaho a free fire zone for naval air, sea and undersea warfare training operations.  Do not let bullets, bombs, shells, rockets, missiles and depth charges fired into the air and waters of our coast for decades to come with deadly,	proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
	permanent consequences to wildlife and ecosystem values.	The training that the Navy proposes is essentially the same as has been conducted for decades in the NWTRC with no resulting injuries to marine mammals or destruction of habitat.
Elsea	its a bad idea to do this because im afraid it will be affecting the marine mammels especlly the orcas which need there sonar to catch there salmon im afraid if this happens they will have more trouble trying to catch there food and to comunicate with each other.  sincerly breanna	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Enell	Please, Please, Do not conduct your bombing practice in the Marine Waters off of the Wash. Coast. We have wales that do not tolerate such a disturbance. We were declared a federal Marine Sanctuary so please take your war games and related exercises elsewhere. Dean Enell	This comment has been duly noted.
English-01	I am in favor of the "No Action Alternative" in the Northwest Testing Range Compexies Draft EIS.	This comment has been duly noted.
English-02	I am opposing the Navy's testing of depleted uranium weapons anywhere;	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
English-03	I opposing the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them;	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
English-04	I opposing testing of any kind without independent environmental impact research and viable citizen oversight of environmental compliance.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
English-05	I urge the Navy and the US Government in taking all actions necessary to protect and restore our fragile marine ecosystems - as part of their duty to the citizens of the United States and their moral and treaty obligations to native	This comment has been duly noted.

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	peoples.	
Engstrom-01	I am strongly apposed to any sonar testing in any bodies of water. Sonar testing causes needless environmental injury and harms entire populations of whales, dolphins and other sea animals. Your own EIS talks of whale strandings in Greece, Portugal, Canary Islands and Spain. There have also been strandings in the USA.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Engstrom-02	Also, I strongly appose the use of sonobuoys, marine markers and explosions in any body of water. In my opinion this is sheer madness, the oceans are the homes of all sea animals. How would you like your home to be filled with trash and environmental wast. Please, please stop the harm and death of our wonderful sea animals.	The potential impacts of military expended material are analyzed in various resource sections throughout Chapter 3 of the Draft EIS/OEIS.
Enright-01	Why are you planning on increasing training in this area, when we already have designated training areas? One plane flying over can be very scary for children, animals, and war veterans. We moved here for the peaceful environment and now I worry that our lifestyle will be impacted.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Enright-02	I also have concerns about the use of sonar and submarines off of our coastline. This could greatly impact our marine mammal life.Sincerely, Barbara	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Erdmann	Please stop all activities of pollution and ruination of our waterways in the Pacific NW. Go to the middle of the Pacific Ocean or just plain stop war type education, get into peaceful helping the environment type activities then other nations will do the same.	This comment has been duly noted.
Eriksen-01	Gentlemen; I vigourously protest the plan to disrupt the eco-systems of the coastlines of California, Oregon and Washington for the propsed weapons training exercises. While we need to prepare our troops, this can surely be accomplished without despoiling so much (relatively) clean, undamaged habitat. Thank you, Christopher Eriksen	This comment has been duly noted.

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Eriksen-02	Ladies and Gentlemen: I oppose in the strongest terms the propsed plan to use the west coast, especially the coast along northern California, as a weapons training area. The long-term environmental damage will far outweigh the short-term training convenience for the Navy. Thank you, Joan Eriksen	This comment has been duly noted.
Erly	I live on Orcas Island year around and support your efforts to expand your area in the Puget Sound.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Estes	I am against the Navy training going on in the Pacific Northwest, disturbing the environment.	This comment has been duly noted.
Eventoff-01	My god, how much distruction is enough. STOP! This is insanity!! I object to the U. S. Navy's plan to expand its Puget Sound activities down the coastline to northern California. The plan, begun in the Bush administration, has progressed quietly but steadily and it is close to approval without massive public objections. Newly authorized naval training activities would include extensive air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures (including underwater "training" minefields), intelligence, surveillance and reconnaissance operations and extensive unmanned aerial systems operations (i.e., drones), in an area of ocean from the coastline to beyond the 12-mile territorial limit.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Eventoff-02	During its activities in these waters the Navy could prohibit entry into its training or exercise area. The excuse for pre-empting commercial fishing, tourism, surfing, sports fishing and boating over the entire Pacific Northwest coastline is "national security."	It is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Ewert	I am a resident of Lopez Isalnd for 21 years and I am very concerned about increased noise levels from Whidbey naval base. This is terrifying for our children and a extremely disturbing to our community and way of life.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.
F.	It is cheaper for people complaining about the noise to move out of Whidbey Island than the Navy. It is our choice to live in the island and knowingly living with military people should be the first key to our choice. If you don't like it, there's the south end where people live in acres and acres of land with peace and low noise level. Just don't bark at the noisy house if you want to get in.	This comment has been duly noted.

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Fairbanks	I am in favor of the "No Action Alternative" in the Northwest Testing Range Complex Draft-EIS.  Also i strongly oppose the use of underwater tests that might damage the hearing of whales and other aquatic life or which may cause harm to them in any way.  I oppose testing of ANY kind without independent environmental impact research.  I strongly urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems as part of their duty to the citizens of the United States and their moral and treaty obligations to Native peoples-First Nations peoples.  Thank you, Victoria Fairbanks	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Fanucchi-Bettis-01	To Whom It May Concern, I am very disappointed in the proposed plan to increase activity in the NorthWest Training Complex. Just recently a fighter jet flew about 20 ft. from the top of the roofs of homes in Shelter Cove. This action was irresponsible and scared many of the residents that live near the landing strip here. I would hate to see this type of training increased in such a peaceful location.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Fanucchi-Bettis-02	I am also concerned about the damage that will be caused to the marine life in the ocean off our coast. The Lost Coast is a remarkable area and is pristine, I would hate to see damage caused by using our area for military testing.  Sincerely, Leah Fanucchi	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The full analysis of potential impacts to marine life is found throughout Chapter 3 of the Draft EIS/OEIS.
Farm	Dear Mrs. Kier:  I am writing in response to the solicitation for comments on the Northwest Training Range Complex Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). At the request of the Governor's Natural Resource Office, below you will find comments Oregon Parks and Recreation Department has also submitted online.  Oregon Parks and Recreation Department (OPRD) has jurisdiction and administrative rules that govern the Ocean Shore Recreation Area. OPRD is charged with management and permitting decisions for the ocean shore, as specified in Oregon's Beach Laws (ORS 390.605 390.770). The "State Recreation Area" is described as the area of land or water, or a combination of, that is under the jurisdiction of OPRD that is used by the public for recreational purposes. The "Ocean Shore" means the land lying between the extreme low tide of the Pacific Ocean and the statutory egetation line (ORS)	In the unlikely event that naval military expended material requiring an emergency response were to come ashore, anyone finding such materials should contact their local emergency response agency. Based on Navy's long history of training in waters around the U.S. without causing health risks to the public, Navy disagrees that it is imperative that an emergency response and salvage plan be developed in coordination with appropriate state and federal agencies.

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	390.770) or the line of established upland shore vegetation, whichever is farther inland. OPRD strives to promote public health, safety and welfare, to protect the state recreation areas and the safety of the public using such areas, and to preserve values adjacent to and adjoining such areas, the natural beauty of the ocean shore ecosystems and the public recreational benefit derived therefrom.  The draft EIS/OEIS notes that the proposed activities would occur offshore of	
	Oregon, primarily beyond the 12 mile territorial sea. However, given the wide variety of activities proposed (e.g., live fire training against surface and air targets, gunnery and bombing, missile firing, torpedo firing, vessel movements, aircraft operations, active sonar operations, Unmanned Aerial Systems etc.), OPRD has interests regarding the potential for impacts to the Ocean Shore Recreation Area.	
	The EIS mentions that, "although extremely rare, some solid training materialscan migrate ashore where the public could encounter them." There is the possibility, although unlikely, for failure of the built in redundancies to prevent such occurrences, for example, in a storm event. Therefore, as managers of the ocean shore, OPRD is concerned that the draft EIS/OEIS does not mention an emergency response and/or salvage plan. If naval vessels, naval marine debris and/or hazardous materials were to come ashore, they would potentially pose a safety risk to ocean shore visitors and resources.  It is imperative that an emergency response and salvage plan be developed in coordination with appropriate state and federal agencies (e.g., OPRD and its partners in the Oregon Emergency Response System).	
	Please let me know if you have any questions or if I can be of further assistance.  Sincerely, Jeff Farm Ocean Shore Recreation Area Manager Oregon Parks and Recreation Department	
Ferguson	PLEASE do not do underwater testing in our oceans. WE will not survive if ALL the other species in the ocean don't. The mammals cannot withstand the testing. Rev. Arlene C. Ferguson	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Ferm-01	I am a resident of Bainbridge Island and frequently spend time with my grandparents who have lived on San Juan Island for over 20 years. I have serious concerns about the proposed expansion of the Northwest Training Range Complex, and the related Draft Environmental Impact Statement.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Ferm-02	I would like to urge you to re-do the EIS to provide adequate environmental analysis to understand the full impacts of that expansion. For instance, the EIS should include an analysis of oil spill impacts.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.

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Ferm-03	I am particularly concerned about the impacts of this proposal and subsequent activities on the orca whales, an endangered species. I urge the Navy to establish an Orca Protection Zone that would exclude sonar training activities in the inshore waters of the greater Puget Sound, including the Salish Sea surrounding the San Juan Islands. All inshore waters of Greater Puget Sound, including San Juan County and the Straits of Juan de Fuca and Georgia should be sonar exclusion zones except in time of active maritime hostilities within or near CONUS waters.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Ferm-04	Finally, the Navy should increase its diligence regarding the potential for oil spills and overboard discharges during exercises, particularly when submarines are involved.  I will be following this issue closely and I hope that you will take my concerns into account.  Sincerely, Nora Ferm	Please see previous response on oil spills. Concerning overboard discharges, Section 3.4 of the Draft EIS/OEIS analyzed potential impacts on water resources. Table 3.4-1 (renumbered 3.4-2 in the Final EIS/OEIS) describes waste discharge restrictions on Navy vessels.
Ferrier	What a waste of effort you're trying to go through - and highly disruptive too. What phantom enemies are you fighting - or is it just more useless makework?	This comment has been duly noted.
Filer	Today I read you are planning weapons training exercises off our Mendocino Coast. Are you aware that we are already fighting both wave energy devices and oil well development off this coast?? We are doing this because of the blight and the affect on marine live and fishing. And the possibility of a rogue buoy colliding with oil shipping vessels off our coast. All we have left here is a dying fishing industry and tourism. Are you aware we need fish to survive?? And healthy fish. Who will replace these fisherman if there are not enough fish to bother with and they hang it up for good?? The tourism depends on the whales. When they go away we will go away. There will be no way to survive here.  And someday we will all go away because we did not care about this planet and all living creatures on it. Judy Filer	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the tourism and fishing industry.
Fipp, Bernard-01	Absolutely, in my back yard! If we don't allow our Armed Services and our national security organizations to operate in our backyard, we may someday find those in our backyard who didn't bother to ask permission.	Thank you for your comment.
Fipp, Beverly-02	I'm in favor of the Navy increasing their training. How can we expect national security if we don't allow our military and security services to train?	Thank you for your comment.
Firth-01	Dear Sirs: I am writing to express my most profound opposition to your plans for testing sonar weapons along our coastlines and other areas in the Pacific Ocean.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.

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	Here are my reasons:	
Firth-02	The Pacific and Atlantic Ocean belong to all the people of the world not just the United States. This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Firth-03	It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the "Navy Warfare Chemical Menu" that will contaminate our air, water, and soil.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Firth-04	White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout ofWhite Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996)	White phosphorus is not used in the NWTRC and is not part of the proposed activities.
	Water Quality Criteria for White Phosphorus – Authors" Kowetha A. Davidson; Patricia S. Hovatter, Catherine F. Sigmon, Oak Ridge National Lab TN: Abstract: Data obtained from a review of the literature concerning the environmental fate and aquatic and mammalian toxicity of white phosphorus are presentedLaboratory and field studies indicate that white phosphorus is quite toxic to aquatic organisms, with fish being the most sensitivebioaccumulation is rapid and extensive, with the greatest uptake in the liver and muscle of fish and the hepatopancreas of lobsterother toxic effects to aquatic organism include cardiovascular and histological changes. (1987) (White Phosphorus is an airborne contaminant – used in fog oil and smoke obscurants.)	
	Mammalian Toxicology and Toxicity to Aquatic Organism of White Phosphorus and 'Phossy Water' by Authors Dickinson Burrows; Jack C. Dacre: AWARE INC Nashville TN – Abstract: "white phosphorus is highly toxic to both experimental animals and manwhite phosphorus is also highly toxic to aquatic animals"  Therefore for not only the sake of our wildlife in these areas but human life as	
	well, which could be seriousy impacted, DO NOT GO THROUGH WITH	

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	THESE DANGEROUS AND LIFE THREATENING PLANS. Sincerely, Richard W. Firth	
Fischer-01	Please stop all testing.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Fischer-02	Hello, I have lived on Lopez island for the last twenty years. During that time I have called the jet noise complaint hotline a few times when I felt that the noise being generated by Naval Air Station Whidbey jets was excessive. While I believe that it is important for the navy to train it's pilots, I also believe that it is important to keep the noise effects of such exercises under control. Noise pollution from aircraft has a negative effect on myself, my family and most everyone on Lopez that I talk to about it. Please keep the jet noise over Lopez to a minimum. Thank you for your consideration. Sincerely, Helmut Fischer	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Fitzgerald-01	The Navy cannot give me adequate assurances their testing will not harm our marine wildlife, and I am vehemently opposed to their being granted permission to conduct their testing over such a wide area. The sonar is of particular concern to us. Please reconsider this matter.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Fitzgerald-02	Too many people in the Northwest have lost sight of the protection that US Armed Forces provide for them. They are more concerned with the well being of fish, animals and trees. As far as I am concerned, you may do whatever you wish to train armed forces in the Northwest. I applaud your presence and wish you were more visible to these tree huggers. They will be the first to ask where you were after we are attacked and they have banned your presence here. Go Navy!	This comment has been duly noted.
Fitzpatrick-03	The Oregon Albacore Commission, an industry funded state commodity commission representing the commercial Albacore Tuna fishing industry, submits the following as comments on the Northwest Training Range Complex Environmental Impact Statement (EIS).  Comment Period: We appreciate the deadline extension to February 18, but this still does not allow the general public ample time to read the EIS, understand its implications, and respond timely.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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Fitzpatrick04	Public Hearing: Notification for this meeting was not received by the general public until one to two days before the hearing. Even our state legislative representatives were not aware of the hearing until just days before. There should have been more outreach along the Oregon coast for a matter as important as this.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Oregon State Legislators were notified of the meeting schedule in December 2008. Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Fitzpatrick-05	With the impact to such a large area of the Oregon coast, having only one public meeting in Oregon leaves the remaining coastal communities of the state at a distinct disadvantage for providing public input at a public hearing.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Fitzpatrick-06	The draft EIS was only on display in one Oregon public library and that was in Lincoln City, not even Newport where the public hearing was held. This document should have been in the major coastal city libraries.	The Navy determined how many EIS copies to distribute and to which public repositories based on locations with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited publication and distribution budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F.
Fitzpatrick-07	Comments: The Oregon Albacore Commission is very concerned about possible fishery impacts such as closures to areas, accidental encounters with training exercises, and debris on the bottom (exploded and unexploded ordnance, or even sunken ships or parts of ships).  Our fisheries already have very restrictive area closures and time restrictions and to impact that with even another day of a closure could be economically catastrophic.  The fixed gear (pot, longline) and trawl fisheries fish very specific locales because that is where the majority of certain species reside.  To impact those areas during traditionally intensive fishing periods would	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the tourism and fishing industry.
Fitzpatrick-08	cause socio-economic stress and possible gear conflict.  Also, the probability of live ordinance on the seafloor in traditional trawl areas poses a serious threat to safety.  As seen in California military operations, subsurface or even near surface detonations during short term or small area fishing seasons can put fish "off the bite" for days afterward. The impacts of these detonations and the use of high energy sonar to marine mammals is also a serious concern.  The potential impacts to fisheries, marine mammals and coastal economies is not an acceptable trade-off for increased naval activities in these areas. We do not feel that the EIS adequately addresses what this federal action may have on the human, natural, or cultural environment.	The potential impacts of military expended material are analyzed in various resource sections throughout Chapter 3 of the Draft EIS/OEIS.  Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Flanagan	I do not agree with the hazzard that will come of the Northwest Training Range Complex. This would ruin our beautiful Northwest and its pristine	This comment has been duly noted.

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	beauty and make it an unhealthy place to live. Our Pacific Ocean should not be poluted more by the things that will come from this Training Complex.	
Flax	I am very concerned about the Navy's proposed plan to expand testing for new weapons systems and to sink depleted uranium munitions. I support the "no action alternative" and hope that you will take the concerns of the	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
	community into account when deciding which plan to pursue.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Fleming, C.	I strongly oppose expansion of the Navy's Northwest Training Range Complex due the impacts on marine wildlife. Marine life, especially mammals is already severly affected.Impacts on the environment in this area should be reduced, not increased.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Fleming, M.	I recognize the importance of keeping a well trained military. As a pilot I also recognize the importance training both for military readiness but also for flight safty.  My family and I welcome naval traing. We find the sound of military air craft the sound of freedom. Proximity to the naval air facility as well as emergency landing field make the San Juan Islands an ideal training area.  Michael J. Fleming	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Flum-01	There has been not one local announcement(Fort Bragg Advocate Paper, Mendocino Beacon) for your plan to test these weapons in the waters off of Fort Bragg and Mendocino, Calif. There has not been a study to determine the negative effects on the migrating Gray Whales, the visiting Killer Whales or the other marine life.	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.
Flum-02	There has not been one meeting for the public in either Mendocino or Fort Bragg. Cease and desist immediately all plans for testing until the laws both local, statewide and national can be followed. You are going forward with a plan that is possibly illegal and does not have the approval of local or state governments.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.
Flum-03	People are saying that they are unable to get to this site. Please rectify or respond to [personal e-mail address deleted.]	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.

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		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Foot	The Navy shouldn't take over our coastal waters as training areas that may very well drive our whales crazy, and could harm our fisheries, and will certainly promote military solutions to diplomatic problems. And oil companies should be denied the permits necessary to drill (and possibly spill) offshore oil reserves instead of turning to alternatives to fossil fuels.	This comment has been duly noted.
Forker	Jets from your base routinely and flagrantly violate what I understood was an altitude floor intended to keep them out of civilian air space. The number I recall was 2000', though I have no independent verification of that. In any case I have seen military jets flying over my house well below the airspace recently occupied by helicopters and tanker aircraft taking off from the Winthrop Smokejumper base. I think the hazards here are apparent. In addition, having these jets returning three or four times within six or eight minutes to execute rolls over the town of Winthrop at an altitude of less than two and sometimes less than one thousand feet seems calculated more to stick a finger in the eye of the locals than to give these pilots any realistic flight experience. If NOE experience is needed why not have them down at a hundred feet or so over the military range south of I 90? I find the manuvers over the town of Winthrop closer to adolescent grandstanding than military training. It seems that the frequency of low level flyovers has increased every year that I have lived here (and I have lived in the area since 1973). The thought that you intend to double the current rate is appalling and I intend to to all I can to protest.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Forrington	I'm just a concerned citizen and what I have been reading about this issue is quite alarming to me. Our mill and fishing industries have shut down, and all we have to keep our town alive is the tourism our pristine Mendocino coast. Your actions threaten that, and will turn this area into a ghost town if you persist in your activities. My understanding is that you already have designated areas for testing, and for you to do it where there are people and environments that could be negatively effected is so wrong, on so many levels ~ I will leave it to the more technically articulate to explain why if you don't already know. And, if you don't know, please find out and stop this action. Thank you, Sandy	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Fortun	As a resident of the south end of Lopez Island I strongly object to increasing the number of flights and the noise that goes along with that. Already the jets regularly fly over head and disturb the quality of life here in the islands. We appreciate our military but we urge that all non essential flights be curtailed and that more attention be placed on keeping the jets over the straights and ocean and not over land!!!!! These flights-every one costs a lot of money and now is not a time to be wasting it with unneccessary flights that are also harmful and polluting the environment. No more flights, please!!! Jill Fortun	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.

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Foster-01	I am very disturbed that the Navy and administration continuing to show disregard for the ecology of the pacific northwest. This appears to be against the new administrations policy toward preserving/repairing our planet. I support the "No Action Alternative", no increase in testing in our waters. Living on Whidbey Island, I realize the need for testing, but also the need to have a conscience in our activities. Thanks  Steve Foster	This comment has been duly noted.
Foster-02	I am against the proposed increase in flights at NAS Whidbey. The existing number of flights was sufficient for the existing aircraft, and should also suffice for the Growlers. The increase in noise, and the fuel used and dumped is unnecessary. Practice electronically as commercial air carriers do, it saves fuel, and maybe even the sensitive receptors that pay for it. Steve Foster	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Francis, K01	We vehemently OPPOSE the plan to expand the Northwest Training Range Complex!!!!!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Francis, K02	Thank you for reading this and for placing this comment into the recored. I am extremely concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine sanctuary, no less, and I emphasize the word sanctuary.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Francis, K03	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, bad enough in itself, but some of it people eat, even worse.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Francis, K04	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Analysis of heavy metals is discussed under Section 3.3.1.1 – Hazardous Materials.
Francis, K05	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.
		To illustrate the potential effect to various species, Sections 3.6 through

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		3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Francis, K06	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Francis, K07	Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Francis, K08	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Francis, K09	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Francis, K10	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Francis, K11	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used

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		is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Francis, K12	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Francis, K13	Thanks for reading this.  1) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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		impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Francis, K14	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic. And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Francis, K15	3) Another issue: access to the EIS documents was off-line/ unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
	review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Francis, K16	Other points I feel need addressing are these: 4) There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Francis, K17	5) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Francis, K18	6) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Francis, K19	7) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Francis, K20	8) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in	See response above on depleted uranium research.

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	fisheries, fish, and other marine fauna.	
Francis, K21	9) Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	All Best Management Practices, Standard Operating Procedures, and Mitigation measures are discussed as they relate to their respective resource sections: Section 3.16 for Public Health and Safety; Section 3.16 for Marine Mammals; Section 3.7 for Fish; and Section 3.6 for Marine Plants and Invertebrates.
Francis, M01	The draft Environmental Impact Statement (EIS), dated December 2008, does not fully address the potential environmental impacts on multiple resources, such as: * air quality, * water resources, * airborne acoustic environment (on land and in the ocean), * biological resources, * marine and terrestrial impacts, and * human health and safety. Without a complete understanding of these impacts, it is impossible to determine "there are no significant impacts" This statement is made throughout the entire document even though many of the chemicals used are highly toxic. Furthermore, the EIS does not give a complete list of the chemicals used.	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below. Section 3.2 Air Quality Section 3.4 Water Resources Section 3.5 Acoustic Environment (Airborne) Section 3.11 Terrestrial Biological Resources Section 3.16 Public Safety
Francis, M02	I request that: * this project be delayed to allow more time for public comment, * a list of all chemicals be provided, and * hearings be held in all cities of 300,000 or more population. Sincerely, Mary Francis	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Frank	I am very concerned about the proposed Naval testing off the coast of Mendocino County. This pristine area is a path for whale migration. Our foundering fishing industry would be disrupted and I am worried about the general safety factor and potential for a horrendous accident. I urge you not to proceed with this plan.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Franklin	I am very against the Navy's plan to increase warfare training off the Oregon Coast	This comment has been duly noted.
Franzen	As a student in Environmental Education, who has particular interest not only in educating the public about the health of the natural environment, but of the sustainability of our cultural environment as well, I am disappointed at the lack of clarity and accountability present in the U.S. Navy's Northwest Training Range Complex Draft EIS/OEIS. As a former resident of Whidbey Island, and a continuing resident of Western Washington, I am drawn to be skeptical of the assumptions that this document is making about the impacts that would be placed on the natural and cultural environments of our region by increased military training. I came upon this article a few days before the extended comment period will be over and I wonder: How much effort was put into making this EIS available to the public? Why is this EIS, which could allow the increased use of missiles, bombs and shells in air, surface, and subsurface environments in the Puget Sound and coastal waters, moving forward so quickly and so quietly?  On the Northwest Training Range Complex's website, I was greeted with	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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	a complacent, uninteresting film about the Navy's dedication to the natural environment. I watched the entire video and not once did I hear one example for which the Navy could be held accountable.  I find this pretty unrealistic, to be honest. How has the Navy's training affected the marine and terrestrial environments in the past?  I want to know what mistakes have been made on the part of the Navy and how, if at all, the Navy has learned from these mistakes and whether or not these lessons learned are being applied in the most recent EIS document.	
	On the website, the Navy stated that the Northwest Training Range Complex provides "Navy and Marine Corps personnel with the space and facilities needed to conduct realistic training, which is essential for the safety and readiness of military personnel and the success of the military mission" (http://www.nwtrangecomplexeis.com/getlnvolved.aspx). Does the success of military training efforts take precedence over the health and sustainability of the environment in which we live? How are we protecting our nation by degrading it environmentally through increased weaponry use in both marine and terrestrial locations? What will this increased missile, bomb, and shell usage look like on its impacts in the environment? The article stated that the overall Navy study suggests that significant effects on marine life would not take place. How is "significant" defined? I live in this region precisely because of the value placed on the health and longevity of the natural environment, and in correlation, the human/societal environment as well.  The Navy should make this EIS more available to the public and hold themselves accountable for the mistakes they have made.  Painting a picture of perfection is not what I, as a student and as a citizen of this country, want to see. I'm tired of perfection, because perfection is not realistic. Let me know how you hold yourself accountable, what mistakes you have made and what impacts are truly expected in increased training, and then maybe the discussion will finally start. Until then, I shall remain skeptical and wonder — what environmental and societal costs are we pushing onto future generations by not thoroughly discussing issues such as this. What will our future generations say?	
Freehill-01	TO WHOM IT CONCERNS:  I AM DOING MY BEST TO COMMENT ON YOUR US NAVY EIS BUT THERE ARE SO MANY UNCLEAR POINTS THAT IT IS DIFFICULT TO RESPOND CLEARLY OR KNOW JUST WHAT IS INTENDED OR TO BE THE EFFECTS OF THIS PROJECT.  PLEASE READ THE FOLLOWING COMMENT AND ANSWER ALL QUESTIONS BELOW.  1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year?  2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.

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Freehill-02	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Freehill-03	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.
Freehill-04	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels.	The Navy's primary jet fuel is JP-5.
Freehill-05	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in th
Freehill-06	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Freehill-07	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	The potential impacts of all chemicals used in the proposed activities are found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the

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		NWTRC and is not part of the proposed activities.
Freehill-08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
Freehill-09	10 - How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Freehill-10	<ul> <li>11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well.</li> <li>12 - Studies of the synergistic effects of project chemicals on bio-</li> </ul>	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Freehill-11	accumulation in fish and other marine food supplies.  13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military?	No.
Freehill-12	IF THERE IS TO BE ANY IMPACT ON THE HEALTH AND WELL BEING OF MARINE AND/OR HUMAN LIFE DUE TO THIS PROJECTWHICH I BELIEVE THERE IS A GREAT DEAL OF RISK AND HARM TO BE MADETHIS PROJECT MUST STOP AND BE FULLY REVIEWED IMMEDIATELY. THIS COMMENT PERIOD WAS FAR TOO BRIEF AND THE IMPACT OF THESE ACTIVITIES NEEDS FURTHER CLARIFICATION AND ELABORATION.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Freehill-13	GIVEN THE Environmental Impact Statement AS WRITTEN, I DO NOT AGREE WITH THE CONTINUATION OF THIS NAVY TESTING PLAN IN ANY WAY. FROM WHAT I CAN SEE FROM THIS STATEMENT THE NW TRAINING RANGE COMPLEX IMPACTS WILL REACH FAR BEYOND THE BOUNDS OF THE TESTING SITES THEMSELVES AND LEAD TO IRREPLACEABLE IMPACTS AND DESTRUCTIONS OF THE PRECIOUS HUMAN AND MARINE LIFE IN THIS UNIQUE AND DELICATE REGION. THE HARMFUL EFFECTS FAR OUTWEIGH THE BENEFITS AND THIS AREAESPECIALLY AROUND AREAS OF WHIDBEY ISLAND AND THE OLYMPIC PENINSULA HAVE BECOME TOO DENSELY POPULATED TO BE USED FOR SUCH ACTIVITIES ANY MORE. THANK YOU FOR YOUR ATTENTION, MAUREEN FREEHILL PORT TOWNSEND, WA	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges. Impacts to resources have been discussed in detail throughout Chapters 3, 4, and 5.
Freeman, C.	Of the proposed alternatives, I strongly support the status quo. Unfortunately, reducing the tests is not an option at this time. The expense of these tests, both financial and environmental cannot conscientiously be supported. There will probably always be people who like to create explosions, but can we say the same for whales and a healthy off-coast environment? Thank you for your	This comment has been duly noted.

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	consideration on behalf of all living organisms. Respectfully Carole Freeman	
Freeman, D.	As a citizen that lives in the west I am absolutely opposed to using an already stressed marine environment for testing weapons. The United States already has the most efficient human being slaughtering equipment known to man. Do we really need to poison the waters off our coast in the effort to become more profficient at war? I think not. I would like it if someday we can eat fish from our own coastal waters and not worry about whether it has been poisoned by weapons testing. Stop this idea of weapons testing and use the funding for something useful, like cleaning up the existing testing ranges.	This comment has been duly noted.
French	I am concerned that the naval training exersizes would disrupt Oregon's fishing and tourist industry. My state needs this income to stay "afloat" during the current economic crisis and beyond. If the fishing and tourist industry is deterred from operating off our coast because the US Navy is busy practicing war games, we lose money.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
French	I am concerned that the sonar used for your ships and submarines would hurt the whales which cruise our coastal waters. I am also concerned regarding the new buoy wave energy program that is being installed off our coast in an effort to increase our natural energy resources.  While I support and deeply respect our armed service members for all they do, I cannot support making war, practice or not, when peace and an open hand is the real answer.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Friedland	Sirs  The North Pacific Ocean off the shores of WA and OR is much too valuable to contaminate and to violate with explosions. The sonar is harmful to marine mammals many of which are endangered as well the endangered salmon.  What impending naval battles do you need to train for? Find a place in the middle of the ocean if you need one. The offshore is too precious.	This comment has been duly noted.
Fritzsche	No Action Alternative- I have looked over the proposals and as a citizen who shares the sound with others, business and like, we need to protect it from any more heavy metals and overuse of sonar.	This comment has been duly noted.
Fry-01	I think the NW Training Range Complex extension to all of Washington State is a bad idea for the following reasons:	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Fry-02	1) hazardous materials being used near humans and wildlife,	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Fry-03	2) the affect of possibile contamination of all water systems,	All water pollution concerns of Navy actions were analyzed in the Draft EIS/OEIS, in Section 3.4 – Water Resources.

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Fry-04	3) the inherent danger to all human life and wildlife by the use of weapons of war.	This comment has been duly noted.
Frye	I am opposed to more training off the pacific coast. Our marine mammals are already in jepardy from naval training and putting in a mine field doesn't sound so good either.	This comment has been duly noted.
	I would like to see the navy take more responsibily regarding how sonar activites affect ocean life.	
	Thanks for the opportunity to comment, Anne Frye	
Fuchs	Security is one thing but affecting the ecology and sea animals, and taking	This comment has been duly noted.
T uchs	away peoples' economic and recreational activities near/on the shore is another thing. This scope is exceedingly wide and not necessary for our security. It is wasy too intrusive and damaging to nature.	This comment has been duly noted.
Fuiten	I sometimes fish in the waters described in your impact statement. I am more than happy to share the space with the US Navy. Please continue your practice efforts with our heartiest blessing.	This comment has been duly noted.
Fulton	I realize the importance of naval airplanes training. I do not understand why they have to fly over the San Juan Islands? The Pacific Ocean is directly west of us, why not have the planes fly over the Pacific? The noise from the planes is so loud, one cannot talk or hear anything when the planes are flying over. I would also to know why they seem to be flying over more often?	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Furey	I think this is a horrible idea and that the federal government should shrink its powers back to within its constitutional rights	This comment has been duly noted.
Furman-01	Southern Oregon Ocean Resource Coalition – SOORC PO Box 1160 – Coos Bay, OR 97420 (541)267-5810 Phone (541)267-5772 Fax March 10, 2009 Naval Facilities Engineering Command Northwest 1101 Tautog Circle, Suite 203 Silverdale, WA 98315-1101	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could
	Attn: Mrs. Kimberly Kler – NWTRC EIS	be submitted by mail postmarked no later than the closing date.
	The Southern Oregon Ocean Resource Coalition (SOORC), representing commercial, charter and recreational fishing interests, and allied marine resource-dependant businesses in Coos Bay and the surrounding communities, offers the following comments on the Northwest Training Range Complex EIS. Public Comment Process: While the extension of the 'public comment period' to March 11, 2009 is appreciated, it still provides far too little time for adequate, thorough and comprehensive review of the	
	document in question by the vast majority of the potentially impacted parties, namely the 'ocean user' community. Given the magnitude of the planned	

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	expanded training activity in waters of significant economic value to the commercial fishing industry, more time is needed to evaluate, understand and articulate a response.	
Furman-02	The first 'public hearing', held on January 30th in Newport, OR, was conducted with minimal notification and provided little opportunity for meaningful participation by anyone other than alert locals who scrambled to respond. Although a concession was made to hold a second meeting for public input, it should be noted that while Tillamook is undeniably the 'heart' of Oregon's coastal dairy industry, its County Fairgrounds are far removed from major ports associated with the commercial fishing industry and hardly an appropriate location for a meeting of this importance. Neither is the Lincoln City Library, the place to house the only available draft copy of the full EIS document and expect any serious review and comment. The Oregon Coast is traditionally identified in three regions - the North Coast, Central Coast and South Coast – with Astoria, Newport and Coos Bay, the primary population centers associated with those regions respectively. If the Navy truly wants informed feedback on its proposed training plans, public meetings should be held in all three of the above-mentioned communities, with timely notice given to insure adequate participation of all interested parties, especially those representing commercial fishing and marine interests.	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Furman-03	Associated Concerns: We join in the chorus of those who have expressed their well-founded concerns about the expanded training plans outlined in the EIS. The commercial and recreational fishing fleets that utilize the waters adjacent to the identified training areas will be impacted by increased activity on a number of different levels, many of which have been articulated in the hastily prepared public and written testimony the Navy has undoubtedly received to date. Disruption of fishing activity due to area closures; debris left on important fishing grounds; increased ordinance detonation and related sound amplification; accidental encounters with underwater training activities; and disturbance to fish and marine mammal populations are all valid reasons why the 'No Action Alternative' is in our view, the only reasonable course given the potential impacts associated with the proposed expanded activity in the designated area. Thank you for the opportunity to respond.  Sincerely, Nick Furman, Chairman Southern Oregon Ocean Resource Coalition  cc. SOORC Sen. Jeff Merkley Sen. Ron Wyden Rep. Earl Blumenauer Rep. Peter DeFazio Rep. Kurt Schrader Rep. Greg Walden Rep. David Wu Oregon Coastal Legislators Sen. Betsy Johnson Sen. Jeff Kruse Sen. Joanne Verger Rep. Deborah Boone Rep. Jean Cowan Rep. Wayne Krieger Rep. Arnie Roblan Rep. Brad Witt	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. It is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Concerning debris in fishing grounds, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Gaffin	WE have lost our fish. We have lost our forests. We have lost our climate. We have lost our health. We have lost our jobs. We live amongst ruins of scalped land and sea. We have the wreckage of overbuilding ruining our lives, ruining the animals lives of sea and sand and ruining life for all the future offspring of land and sea. The ruination must stop. The Navy must	This comment has been duly noted.

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	consider all the harm it has done and will do to continue on a path without connecting the dots. IT IS TIME THAT ALL RETHINK THE LITTLE STEPS SO THAT OUR BIG FOOTPRINT CAN THRIVE AND SURVIVE. IT WOULD BE UNCONSCIONABLE FOR THE NAVY TO PERPETUATE THE RUIN BY TRYING TO SECURE OUR COASTLINE BY CONTINUING TO KILL IT. TO DISRUPT THE FRAGILE COASTAL ECOLOGY WITH SOUIND, TOXICITY, EQUIPMENT, EXPLOSION AND LACK OF RESPECT IS UNTHINKABLE. THERE WOULD THEN BE NO REASON TO SECURE A BARREN, DEAD, SEA AND LAND THAT WOULD REMAIN. BETTER TO PUT ALL THAT MONEY TO GOOD USE IN PRESERVING AND RESTORING THAN TO PERPETUATE THE RUIN. DO NOT DISRUPT THE NATURE WE MUST PRESERVE ON THE PACIFIC COAST. PLEASE!	
Gandhi-01	To: The Admiral Who will sign off on bombing US shores! Representative Rick Larsen U.S. House Armed Services Committee Re: Navy EIS/OEIS with plans to kill marine life; bomb West Coast with DU weapons and violate the Olympic National Marine Sanctuary with War Games. January 29, 2009 Honorable Representative Larsen, My father served 30 years in the Coast Guard. My dad, who raised me, served six years in the Navy. My brother tightened the bolts in a submarine reactor and I scattered his ashes with his widow and four children. My nephew has been Iraq since 2003 (both his children are autistic) and my granddaughter is in the Air Force in Germany. I've read all of Tom Clancy's books and I understand the need to protect the West Coast. But I thought the near shore was the responsibility of the Coast Guard.  Multiple cancer clusters, I'm part of one, in Eastern Washington, Utah and Nevada are directly related to our government's military testing radioactive weapons of mass destruction upwind of populations. DU weapons are radioactive.  How many pages of the hundreds of peer reviewed scientific studies on the harmful radiological effects of depleted uranium weapons do you want to receive? Would you like to receive photographs of the massive birth defects being experience by women in Bosnia, Iraq and Afghanistan from DU weapon use?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gandhi-02	The Navy has blocked comments from being received on the EIS/OEIS.	The Navy's efforts to reach the public for comment has exceeded the requirements of NEPA. Please see Appendix F for a complete listing of notification efforts to publicize the Draft EIS/OEIS and request public comments.
Gandhi-03	Approval will violate several laws. Is the Navy above the law? The Improved Extended Echo Ranging (IEER) system is an improved multistatic active acoustic sensor that extends the EER deepwater search capability into the shallow waters of the littoral. When this system was turned on at PSNS Bremerton	The Navy is in compliance with all applicable statutes and regulations concerning the proposed activities.

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	every auto locking system engaged on Auto Row. The effects of this system's use will extend beyond the shore to harm life.  Multiple reports of dead whales with blood coming out of their ears as a result of this technology is a Red Flag to stop.  Killing marine life with radar, bombing the West Coast, dumping depleted uranium on salt water bottoms and using air to air missiles, etc. within sight and sound of our homeland is not protecting us. If done by anyone else we would know that war had been declared upon us. But our military will be attacking us and the marine life we hold so dear. How can the Navy justify harming those it claims to protect?  Who came up with this plan? Which Admiral will sign off on making war on America by the US Navy?  What will you do to stop it?  What can you do for the Navy to actually hear and take into consideration that we and West Coast marine life do not want to be collateral damage?  Hanford Downwinder Cancer Survivor living on Whidbey Island, Theresa Marie K. Gandhi, Community Organizer, 3rd generation Democrat Former wife Mahatma Gandhi relative and life long patriot.	
Gandini	We live a little south of the center of Lopez Island. We are concerned about your new flying programs. We have been very aware of the increasing noise from the jets, and are hoping that you can fly more out to the ocean than around our island.  Thank you	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Gandy	I wanted to comment on your Northwest Training Range Complex off the Oregon coast. I say go for it, Thank you for all that you do	This comment has been duly noted.
Gangle	I am requesting a 30-day extension of the comment period, until at least March 13, 2009. We Oregon residents did not learn of the Navy's intentions regarding the Coastal Training Range until late in January and there was only one public hearing in Oregon, on January 30. There was only a few days' notice of that hearing, in one newspaper. We have not had time to review the Navy's EIS and need additional time. Thank you for your courtesies.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Garcia-01	1- 'I live in Mendocino and I am very concerned about the Navy's plans to increase weapons testing in the Pacific Northwest ocean area.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Garcia-02	2- While the environmental impact statement states that the Navy has been using the area for training since World War I, there is very little information	The past, current and future activities within the entire Northwest Training Range Complex were described in the Draft EIS/OEIS in Chapter 2 – Description of Proposed Action and Alternatives, and Chapter 4 –

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	about what was going on in the past, and where.	Cumulative Impacts.  In Chapter 2 of the Draft EIS/OEIS, the Navy has described, in as much detail as possible, where training would take place. Due to the dynamic environment in which the Navy trains in the NWTRC, the Navy cannot predict precisely where, within the range complex, that training will take place.
Garcia-03	3- 'The lack of past information makes for difficulty in assessing how "new" activities might present new impacts on whales, fish, currents and the ocean ecosystem.	The Navy has been conducting similar activities at similar levels for decades in the NWTRC with no resulting injuries to marine life.
Garcia-04	4- 'The executive summary at the beginning of the document lacks other crucial details, such as the location of the southern boundary of the testing area. A map with a dotted line that appears to come ashore somewhere in the vicinity of Shelter Cove is the only clue.	The Executive Summary description in the Final EIS/OEIS has been improved, providing the information requested in the comment. The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
Garcia-05	5- 'The document does not mention how the Navy might cooperate with other branches of the service, although the presentation the website states all branches of the service can use the area.	The Navy schedules activities of all users in areas that it controls. Some areas, such as W-93 and W-570 are controlled by other branches of the military. Air and surface activities outside the Warning Areas and within the Pacific Northwest OPAREA are not scheduled at all.
Garcia-06	6- 'The environmental impact statement does not state how the Navy will share information it learns about the ocean with other federal agencies or the general public.	The Navy conducts marine research as a separate activity, not as part of this proposed action. However, the Navy has developed a monitoring plan in which information collected from Navy training activities will be collected and shared with the National Marine Fisheries Service. This monitoring plan was briefly discussed in Section 5.2.1.3 of the Draft EIS/OEIS.
Garcia-07	7- 'I don't believe our environment and oceans can tolerate any more abuse of this kind. Please stop the testing!	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Gargano-01	Question #1Section 2.8 Surface to Air Missile Exercise (SAMEX) (Future Activity): During a Surface to Air SAMEX, surface ships engage threat missiles and aircraft with surface-to-air missiles (SAMs) with the goal of disabling or destroying the threat. One live or telemetered-inert-missile is expended against a target towed by an aircraft after two or three tracking runs. The exercise lasts about two hours. A BQM-74 target drone, sometimes augmented with a Target Drone Unit (TDU), is used as an alternate target for this exercise. The BQM target is a subscale, subsonic, remote controlled ground or air launched target. How can coastal residents be guaranteed that no missiles will go astray and become a danger to boaters or residents?	When the Navy conducts live firings, either of gun or missile systems, safety zones are established around the firing ship or aircraft to ensure that no one is within the maximum range of the weapon being fired. To establish this safety zone, the Navy looks for an area far out to sea where there are no non-participant boats or ships.  It is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Gargano-02	Question #2 Why does the Navy NOT recognize a 12 mile inshore limit to training exercises?	Historically, as well as projected for the future, training within 12 nm seldom if ever occurs off the coast of Oregon and Northern California. Also, no training involving live explosives take place within 3 nm of shore.

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Gargano-03	Question #3 How many marine mammals are estimated to be disturbed or injured (either temporarily or permanently) as a result of the Navy's use of low and mid-range sonar?	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.  Based on this analysis, as described in the Draft EIS/OEIS, 129,111
		marine mammal could receive sonar to the level where Level B harassment (non-injurious) could occur. No injuries are expected. (Low-frequency active sonar is not part of this proposed action. Only mid- and high-frequency active sonar are proposed for use in this EIS/OEIS.
Gargano-04	Question #4 In previous litigation against the US Navy, the NRDC has won numerousl vital safeguards for marine mammal safety. Will the Navy be employing all of these safeguards in future training exercises in NW waters?	The Navy applies mitigation measures developed in cooperation with the National Marine Fisheries Service.
Garger	I have always been proud of my service in the USMC/USMCR from 1957 to 1963. I was impressed by the Navy personnel I saw in action at sea and on shore during those years. No longer am I impressrd. Your conduct in trying to slip by your quite unbalanced plans with miniscule public notice was bad enough. The plans themselves are worse. They show neither respect for the public good (whose interests you supposedly are serving) nor respect for the honorable traditions and values you supposedly represent. Are you so clueless that you have no concern for the beleagured life forms you are endangering? Are you so soulless that you are not moved by the beauty and majesty and power of the seas and oceans? Are you so blind that you can't see them as any more than your junkyards and sewers? Are you so visionless that you can't see the necessity of preserving their health and well being? You have slick p.r., highly evolved technology, and immense power. It's a shame that you are lacking in wisdom and a shame that you are not ashamed of your behavior.	This comment has been duly noted.
Garner	I am totally opposed to your northwest training range complex!! I don't understand how you can think that destroying 100,000 plus marine mammals per year is worthy! We, too, are mammals and I don't think we would approve of some other species having "training games" that would disrupt our ability to survive in our environment. Have you no heart? All species depend on the ocean to survive. If you continue your "games and training", you will be responsible for the death of the oceans and ultimately human life.  War is USELESS!!!! It is time for Peace on this planet. I am completely opposed to this plan and hope that you will rethink how stupid all of this is.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Garrod	I am surprised with today's modern technology that you are not doing all your training with computer simulation. There is no need to start doing more blasting in shallow or deep waters. With the state of our oceans I feel that the Navy should be taking a more active role in cleaning up our water ways. They	As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitations to simulated training that necessitate live training, such as that in the NWTRC.

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	should be in the forefront of discovering new innovative ways to help the world regain the diminishing fish species that feed us and restore our oceans back to a healthy living organism. Why must war and practicing for war be your only mission? I think taking care of the gifts, that God almighty has given us, is much more beneficial than war play.	
Gatto	I request more consideration for the full impact each persons decisions has on the whole and from there, to consider in intimate detail the impact of this decision on each individual being that lives and thrives off of the optimum health of there home in the deep waters of the sound.	This comment has been duly noted.
Geary-01	I. I demand an extension of the Mar. 11 2009 deadline for public comment on the document.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Geary-02	2. I object to the Navy's making unfounded assumptions about where humans may or may not be present in the four-state area the Navy wants to commandeer for target practice. The Navy is incapable of determining such presence with any accuracy and is, in any case, entirely without the right to violate and contaminate the environment of residents of those states.	This comment has been duly noted.
Geary-03	3. The Navy's proposal to release the fallout from uranium weapons over ANY area of the US is unacceptable.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Geary-04	4. Fallout from uranium ordnance would of course not be restricted to the four states mentioned in the Navy's desired target area. The fallout would move inland. This fact means that the designation of a four-state area as the area of impact is entirely inadequate. The Navy is proposing to nuke the Pacific Ocean and the continental US.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are

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		minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Geary-05	5. All the questions asked by Rosalind Peterson need to be answered satisfactorily, and all documents demanded by citizens under FOIA must be furnished, since the Navy has burdened the public with the proposal.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Geary-06	6. However such answers, and furnishing of all documents demanded under FOIA do not suffice, nor can any further answers and documents suffice, to make the Navy's proposal in any way worthy of consideration by the EPA or any responsible agency of government.	This comment has been duly noted.
Gedeon-07	1) I am in favor of the "No Action Alternative" in the Northwest Testing Range Complex Draft EIS.	This comment has been duly noted.
Gedeon-08	2) I strongly oppose the Navy's testing of depleted uranium weapons anywhere.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gedeon-09	3) I also oppose the use of underwater tests that might damage the hearing of aquatic mammals and other aquatic life or cause other harm to them.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
Gedeon-10	4) I oppose invasive testing of any kind in a underwater sanctuary. 5) I oppose testing of any kind without independent environmental impact research. 6) I oppose testing without viable citizen oversight of environmental compliance.	There is no invasive testing conducted in the Sanctuary.  The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
		Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.
DIDLIG DADELGIDAS		The authors of the EIS/OEIS drew heavily from independent scientific

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		studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Gedeon-11	7) The coastal and ocean ecosystems are a beautiful part of our great country. Harming them harms our country. I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems - as part of their duty the citizens of the United States and their treaty obligations to native peoples.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.
		The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.
		In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Gedeon-12	Finally, the public comment period must be extended, given that your website for submitting comments was inoperational for a significant portion of the comment period.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Gee	terrible, awful,horrible idea to test navy "war" bombs, chemicals, pesticides over, in and around california, oregon, idaho, washington states and the pacific ocean  SHAMESHAME on you navynot a proud and honorable thing to do	This comment has been duly noted.
Gehrke-01	I oppose the expansion of the Navy's Northwest Training Range Complex due the impacts on threatened and endangered species. Especially with proposed testing of new systems and inadequate marine mammal monitoring, a "No Action Alternative" is the preferred option.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been

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		conducted in this same area since World War II.
Gehrke-02	The impact on the environment is significant, as is the economic impact on fisheries and tourism. The Oregon coast is a valuable economic and cultural asset that should be preserved. If training is allowed, then careful monitoring must occur to ensure that the marine life and environment is not harmed or destroyed.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Genia	I oppose the increased militarization of the Pacific Northwest. I believe that this plan is the utmost of irresponsibility to the ecosystem and the residents of this region, my home. I do not consent to being a test subject for the military and do not wish that our delicate ecosystem should be a test subject or training range. I am fully against this plan. Please stop immediately. I believe that this highly increased militarization of our area, given the state of our economy and the rapidly changing climate, should be a crime.	This comment has been duly noted.
Gentz	I strongly object to the utilization of this website for aural editorializing about the supposed value and humanitarian activities of the Navy.  Rather, reference should be made to available research specifically pertaining to probable damage to sea animals and related wildlife if this inconsiderate proposal were approved.  Find another area where it might be ecologically safe to pracice your war games.	This comment has been duly noted.
Germond	Please extend the comment period to 30 days to allow a sufficient amount of public comment time.  I realize how important our military operations are for the security of our nation, but I believe public input into environmental issues is also important. Thank you.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Gherard	As a resident of Washington state and someone who enjoys our gorgeous coast and wildlife, I do not support the intended expansion of the Navy's training exercises. This will cause extreme damage to the environment and the wildlife. It will cause pollution in our amazing ocean as well as kill and injure the animals. I have friends who are in the Navy and Coast Guard and I support our men and women in service but I do not support the destruction of one of the most naturally beautiful parts of the world. Thank you for your time and consideration.	This comment has been duly noted.
Gibson	I would like it to be known that I am opposed to the Navy increasing its training area off the coast of Washinton,Oregon, and Northern California. I am especially concerned about the impact on marine mammals. I also feel that the public was poorly informed about the proposal by the Navy to increase its Northwest Training Range Complex. Thanks for your	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the

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	consideration in this matter.L Gibson	same area as they have since World War II.
Giesen-01	The Navy's envisioned NWTRC expansion would pose significant risk to whales, fish, and other wildlife that depend on sound for breeding, feeding,	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active
	exercises proposed would employ mid-frequency active sonar, which has been implicated in mass injuries and mortalities of whales around the globe. The same technology is known to affect marine mammals in countless other ways, inducing panic responses, displacing animals, and disrupting crucial behavior such as foraging.	sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Giesen-02	The NWTRC expansion would also affect fisheries and essential fish habitat, damage hard-bottom habitat, and release a variety of hazardous materials – such as thousands of rounds of spent ammunition and unexploded ordnance	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	containing chromium, chromium compounds, depleted uranium and other hazardous materials – into coastal waters.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Giesen-03	The Navy can, and must, adopt meaningful measures to reduce the harmful impacts of sonar, including spatial and temporal restrictions for its training exercises. These measures should, at a minimum, include protecting the following areas:	The mitigation measures described in the comment are discussed in Chapter 5 – Mitigation, of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Geographic restrictions, such as mentioned in the comment, have been
	•?All inshore waters of Greater Puget Sound (including the Strait of Juan de Fuca and Strait of Georgia)	considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
	•?Lower Continental Slope waters between 500 and 2,000 meter depth contours	
	•?Outer coastal waters between the shoreline and the 100 meter depth contour	
	•?Certain canyons and banks off Northern Washington State and Oregon	
	•?The Olympic Coast National Marine Sanctuary	

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Giesen-04	I urge the Navy to revise its impacts analysis consistent with federal law and to produce a mitigation plan – which includes protected areas – that truly maximizes environmental protection given the Navy's actual operational needs.	Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, developed in cooperation with the National Marine Fisheries Service.
Giesen-05	I also urge the Navy to make available to the public the data and modeling on which its analysis is based.	Portions of the modeling program is export controlled and not available for public release, however, approximate results can be obtained using other mathematical models commonly available to those with the technical expertise to utilize those tools.
Giesen-06	Additionally, I urge the Navy to satisfy its obligations under NEPA and other applicable laws. To that end, the Navy should revise its DEIS, improving its impacts and alternatives analysis and establishing temporal and geographic protection zones to mitigate the harmful impacts of its training.  Sincerely, Erika Giesen	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements.
Gifford-01	Dear Sirs, I heard that the Navy plans to test new weapons, explode underwater charges and lob more "depleted" uranium (half life 4 billion years) in the Olympic National Marine Sanctuary (home to orcas, turtles and much more) among other West Coast locations.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
		Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Gifford-02	end war	This comment has been duly noted.
Gifford-03	Their Web site was down for 15 percent of their environmental impact statement's public comment period (ending Feb. 11!) and folks have been electronically rebuffed attempting to comment.  Please stop these tests and do for others as you'd like them to do for you.  "We are responsible for each other" DR Albert Schweitzer	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Gilland	please do not go above the current provisions. the whales are not readily replaceable. thank you.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant

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		facts and impact analyses.
Gilliland, C01	01- I am primarily concerned with marine life, safety and the impacts of your explosives resultant chemical reactions in sea water. There is some mention	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
	that expended materials will be dumped and/or left in place in Puget Sound.	The potential impacts of military expended material are analyzed in various resource sections throughout Chapter 3 of the Draft EIS/OEIS.
Gilliland, C02	02- At a time when many are coming together to protect the health of the sound, marine life and marine communities, it seems that the Navy's proposed greater use of weaponry runs counter to Washington State's proported goals to preserve, protect and enhance the Sound.	The U.S. Navy has conducted similar training activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy training activities, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from continued training exercises as proposed in the Draft EIS/OEIS.
Gilliland, C03	03- I am also concerned that Depleted Uranium is mentioned as part of what will be dumped/left behind in the Sound. What effect will this and other heavy metals have on human health, marine life, and salmon?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gilliland, C04	04- Finally, sonar use is a major concern for marine life.	The potential impacts to marine life of the Navy's proposed sonar use is analyzed in Sections 3.6 through 3.9 in the Draft EIS/OEIS.
Gilliland, C05	05- Who will be in charge of oversight? Citizen oversight seems to be necessary to ensure the level of trust for our communities.	The EIS requirement obliges federal agencies to consider carefully the environmental consequences of their actions. This is done by holding public comment periods for the DEIS and placing the FEIS on public display at local local libraries upon completion. Hence, public scrutiny places a heavy burden on the agency to fulfill its responsibility.
Gilliland, C06	06- I am recommending the "No Action/No Change" option for the NTRC. There has got to be better ways to train without explosives and increased sonar use, which has been proven to have a negative impact on marine mammals such as whales and dolphins. When we look at the future of security for our nation, most foreign policy and security experts agree that the issues involve breaches in our borders.	This comment has been duly noted.
Gilliland, C07	07- Increased sonar and underwater explosions are not addressing what poses to be the greater threat to our country. With the health of the Sound, orcas and salmon so severely depleted, it seems this the wrong time to expand programs that will harm the environment our marine life and habitat.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is

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		little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		Potential impacts to salmon and other fish are analyzed in Section 3.7 of the Draft EIS/OEIS.
Gilliland, C08	08- Please do not choose option 1 or 2, but rather "No Action". Please work with the new Administration and Department of State to address the true and realistic needs for America's security.	This comment has been duly noted.
Gilliland, D.	I fully support our military defending our western coastline. Thank you for being there for our safety.	Thank you for your comment.
Gillock-01	Please stop this madness! I realize all new toys and gadgets can be irresistible but you need to grow up and see the untouched value of so much you are targeting for destruction. It is not your ordained right to exploit any part of this beautiful planet. If you grow up you will wise up.  Sincerely, MJG	This comment has been duly noted.
Gillock-02	http://news.bbc.co.uk/1/hi/world/asia-pacific/7918144.stm Australian authorities are racing to save dozens of pilot whales and a small pod of dolphins beached on an island. I wonder if you could tell me if there was military sonar activity in the area? This is why I do not want your planed activities to take place anywhere in the world but most especially off the Pacific North Coast! Sincerely, MJG	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Ginsburg-01	Dear People, We would like to comment that the sensitive ecosystems of the NW coast are not only a reservoir for many rare species of animals and plants but also help support commercial fishing. The last thing we need is the	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
	dispersal of more depleted uranium, increased use of powerful sonars, and vaguely or unspecified "new technologies" that have not ever been vetted.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Ginsburg-02	The EIS does not adequately demonstrate that the toxicity of various weapons systems will not adversely affect this area. We ask that a more complete environmental review, with a full list of all substances that will be released into the environment (along with quantities) be completed with the full participation of the scientific community. Claude Ginsburg, Director No Spray Zone	The potential impacts of hazardous materials resulting from the Navy's activities were fully analyzed in Section 3.3 of the Draft EIS/OEIS.
Gipson/Davis	We prefer the no action alternative!!	This comment has been duly noted.
Gladstone-01	My wife and I are extremely concerned about your intent to increase your training exercises off the West Coast and in the Puget Sound area. Before you proceed with this unnecessary folly, you need to provide a more comprehensive report on the environmental	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent

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	impacts, as well as suggest more reasonable alternative to the proposal.	studies.
Gladstone-02	In particular, since the proposal covers the Olympic Coast National Marine Sanctuary, much more specific proposed training details are needed. Any naval activities, including but not limited to sonar, would have negative consequences for a range of listed and endangered species, including a decreasing pod of southern resident orca whales. You need to remember that you are a part of the United States military which is a part of the United States government, which is paid for and belongs to the United States people.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Glover-01	I am REALLY, REALLY, EXTREMELY REALLY CONCERNED about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Glover-02	Where I live in the state of Washington, the area that would be effected is a marine sanctuary isn't that supposed to mean something?	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Glover-03	How can you possibly consider putting depleted Uranium into water where my family and I swim, water that gives life to the fish and shellfish that we eat from these same waters? Radioactivity is nothing to fool around with, how can you consider being so reckless?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Glover-04	How about the effect of heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and people?	Discussion of heavy metals is discussed under Section 3.3.1.1 – Hazardous Materials.
Glover-05	The Navy can't average pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.

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		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Glover-06	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible. Come on, guys!	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Glover-07	Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Glover-08	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Glover-09	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Glover-10	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Glover-11	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.

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		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Glover-12	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Gnatowski-13	I was stunned to hear of your intentions for the North Western Coast. In no way do I support the use of white phosphorus and depleted uranium off my coastline without further studies of how they will migrate through the environment: the air, the water, and the marine life. My family and I are directly affected when toxic chemicals settle with the fog over land or infuse the ocean water we play in. With the dire state of the environment because of toxic overload and global warming, I would think we would know better by now. I urge you to reconsider your plans.	White phosphorus is not used in the NWTRC and is not part of the proposed activities.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Gnatowski-14	There also needs to be some kind of an end date for this program. How can	The proposed activities have no specific end date. However the EIS/OEIS

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	you be allowed to start something and then perpetually expand it without oversight or a genuine effort to communicate with the communities directly affected.	will be reviewed every 5 years for substantive changes.
Gnatowski-15	Only one meeting for the entire area of Northern California? It takes me 1 hour to drive 30 miles because of the mountain roads. We have repeatedly been shown throughout history that lack of regulation does not work. Oversight is needed. We need further environmental studies to consider the "REAL" costs in the long term of your proposed actions.	Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Gnatowski-16	Do we really need to be wasting our precious resources on testing our own version of weapons of mass destruction? I believe that our money should be put to much better uses than this. Thank you for your consideration. Hadley Gnatowski	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Goad	Please don't do this. There area is already too fragile. Sonar is very dangerous to the Orca pods and other transient whales.	This comment has been duly noted.
Goblirsch	I'll make you a deal - I will not object to using our grounds for target practice so long as you use every California Sea Lion you see as a target.  This is probably the only chance to get some long overdue "thinning" done.	This comment has been duly noted.
Gogic	I believe sonar testing should be legally banned in Puget Sound and in the Pacific Ocean in all areas in which our ENDANGERED southern resident orca pods frequent and also in all migratory paths of the humpback and gray whales. Sonar has been proved to cause whales and other marine mammals to become disoriented, traumatized, injured internally and cause damage to their hearing. It also disrupts their communication and echolocation abilities which are extrememly important for them when trying to locate food. I feel very strongly about this and request that you find a place to test your sonar in areas not frequented by these creatures. With all of our technology these days, you should be able to locate an area, way off shore, in which very few marine mammals swim to use this extremely dangerous and damaging system. I appreciate your careful consideration of my request! Thank You, Laurie Gogic	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. The proposed action includes no sonar training within the Puget Sound, training only occurs offshore. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Goldstein, D01	the pacific northwest is an important breeding region for animals that migrate all over the world. any naval activity in our waters will affect the ecosystems of the entire world. also, the culture here will be negatively affected by more military presence. the people here value the influences of the countries to the east, as well as the nitice peoples of this region. this part of the country is making progress in terms of environmentally sustainable technology. If the navy wants to be more active here, it should take careful measures to work in accordance with what this region stands for. we will not be another victim of toxic waste, accidental spills, bombs, etc. nobody wants this, and the people of the pacific northwest will do everything it takes to keep it away	This comment has been duly noted.
Goldstein, D02	The proposed expansion of the Northwest Training Range is unwarranted	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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	due to its excessive impacts on the Puget Sound and coastal waters. The EIS does not address the actual impacts associated with a large increase in explosions and ammunition expended. For this reason I would oppose any increase in activities in the training range. In fact, I would seriously question whether the current level of military action (training, explosions, use of ammunition and toxic materials) is warranted.	proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The Draft EIS/OEIS thoroughly analyzed the potential impacts of the proposed action on the environment. The issues raised in the comment were all included in that analysis.
Goldstein, D03	The EIS makes reference to the "taking" of marine mammals but gives no details of how many mammals would be killed or injured. It is not clear that anybody knows the extent of the damage, either from current levels or the proposed expansion. As you know, orcas in the north Puget Sound area and coastal waters have been declining in population lately. It is known that underwater explosions and sonar such as are proposed can damage their echolocation and be dangerous to them.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Goldstein, D04	Increases of explosions in Port Townsend Bay are a concern because the bay is a relatively small area that sees a lot of civilian uses. The potential for accidents is thus increased, especially with the increases proposed. The Navy solution of ever increasing restricted areas is not a good solution because much of the civilian traffic consists of unregulated small pleasure boats who are not necessarily up to date on exactly where they are allowed to go.	Underwater detonations in Port Townsend Bay, and throughout Puget Sound, are proposed to significantly <u>decrease</u> as a result of the proposed action. Current and recent level of underwater detonation training in Puget Sound is 60 detonations per year. The Navy's proposal is to reduce training to 4 underwater detonations per year, with only 1 in Port Townsend Bay (Indian Island underwater EOD range).  A thorough analysis of these activities in included throughout Section 3 of the Draft EIS/OEIS.
Goldstein, D05	Aside from a blanket assurance that all will be well, there is no analysis of how the increased activities will impact the environment, including sensitive shoreline areas, shellfish, salmon. There has been no serious study of the cumulative impact of the expansion of Naval Magazine Indian Island over the past few years. This proposal represents yet another increase in activity that has significantly increased environmental impacts without a comprehensive study. I am concerned with these issues, not only in Port Townsend Bay, but throughout the Training Range.	The Draft EIS/OEIS thoroughly analyzed the potential impacts of the proposed action on the environment. The issues raised in the comment were all included in that analysis.  The past, current and future activities within the entire Northwest Training Range Complex were described in the Draft EIS/OEIS in Chapter 2 – Description of Proposed Action and Alternatives, and Chapter 4 – Cumulative Impacts.
Goldstein, D06	There are numerous sensitive areas and marine sanctuaries in the affected area, all of which would be affected. The Navy is proposing an increase in the use of toxic materials in these sensitive waters without any serious analysis.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Goldstein, D07	Uranium munitions pose an unstudied toxic threat to marine life both due to the toxic chemical properties of uranium and the low level but extremely persistent radioactivity. When small particles are absorbed into living organisms the point source radioactivity within the organism have effects that have not been fully studied but which appear to be quite damaging. Tungsten or DIME weapons also contain toxic materials with potentially damaging effects on the environment that are not addressed in the EIS.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		Limited scientific studies have been completed on potential environmental impacts of tungsten and tungsten alloys. To date, the studies indicate that the greatest tungsten threat concerns a specific alloy, and only when

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		embedded in animal tissue. Because the tungsten rounds are used only at sea, and only during certain gunnery training exercises, the fate of tungsten at sea is germane. Section 3.3.1.1 of this Final EIS/OEIS analyzes tungsten in sea water.
Goldstein, D08	The Navy, and the US military in general, have not been good environmental stewards. They have generated many superfund sites over the years, including some within this area. At a time when the environment is increasingly at peril, the Navy must join in with all of us in making sure that its activities are safe and environmentally responsible.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.
	The plan for this area should be rethought and thoroughly studied to find ways to avoid further environmental degradation.	The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.
		In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Goldstein, M.	I support the "No Action Alternative" and do not want expansion. There are too many unanswered questions of major importance concerning this plan.	This comment has been duly noted.
Goltz-01	The plan submitted seriously impacts the environment, and may be a long term detriment to Puget Sound as well as the quality of life in the surrounding communities. Marine quality degradation, sound impacts on fish, marine mammals, and residents of Whidbey Island must not be ignored! Thousands of grey whales, orca, sea lions, dolphins, minke whales, seals, etc. travel Puget Sound and should be studied to see what effect will be caused by this increase of activities. Already the orca population, salmon, and other species are dwindling based on current impacts, so to further burden this population by increasing activity is a huge mistake.	The Draft EIS/OEIS thoroughly analyzed the potential impacts of the proposed action on the environment. The issues raised in the comment were all included in that analysis.
Goltz-02	The way this "process" was conducted leaves little doubt that that it was intended to be slipped past the public by timing it for the holidays, and doing	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of

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	very little to publicize the proposed changes. For a major change like this, the lack of informing the public and encouraging comment is a major flaw, and the "extension" is still inadequate. The process should be restarted, allowing 90 days for comment, and allowing for more public meetings, since the last meetings were before the public was aware of the plan, and prepare for the public meetings. Just to read the document requires 40 hours. A shorter synopses should be made public, so that people understand what is proposed, followed by public meetings, to make sure that the public has adequate time to comment. We need to get the plan right the first time, since the potential impact may be irreversible.	notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Goodall	It would be a criminal act to seriously and possibly irrevocably impact the ocean and Sound environment by any SONAR or underwater explosions from munitions in and along the Washington, Oregon, and California waters. The supposed need for the Navy to train is NOT an excuse to impact the marine life, the disrupt food chain, introduce possible toxic materials into the water, and disrupt the normal life of mammals in it, especially since it is a SANCTUARY. Spend the time and money on "virtual" bombing if necessary. But don't ruin our natural resource forever when there are other options.	This comment has been duly noted.
Goodwin, J.	I understand the United States Navy needs to train. But why do they have to choose an area that is trying to revive and renew the fish population that has been depleted over the past ten to twenty years due to over fishing. I am sure if they understood the adverse effect that explosions would have on the project to increase fish populations they would reconsider and not use Port Orford as a training site.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in Section 3.14 of the Draft EIS/OEIS. Impacts to fish and fisheries have been analyzed within Section 3.7.
Goodwin, S01	I am concerned about the plan for reasons of public health. Depleted Uranium is being introduced wholesale into water and seabed to spread radioactivity to marine life; this is troubling in itself, in addition people will eat contaminated seafood.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Goodwin, S02	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Goodwin, S03	I am also concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores.	The U.S. Navy has conducted underwater detonations training and mid- frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented

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		scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Goodwin, S04	This is in a Washington marine sanctuary, no less, and I emphasize the word sanctuary. And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Gordon	The EPA approved these training actions, and supported by our State and Federal Representatives too? STOP polluting our water, air threatening animal and human life with atrocious experiments, and STOP THE CHEMTRAILS looming over our heads here in Pasadena CA.  Does anyone have ethics and a conscience anymore? I wonder.	This comment has been duly noted.
Gorman	using this so called program on humans and our precious marine and wild life not to mention the very waters and air we all share is to say the least inhumane and a WRONG that can not be undone the audacity of officials who believe this is acceptable is completely baffling to the mind DO NOT DO THIS!!!!!!!!!!!!	This comment has been duly noted.
Gorter	To whom concerned, We request for a postponed deadline (April) for public comments, as the EIS is quite extensive. Thank you for your consideration, Uko	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Govedare-01	1) It alarms me to realize that marine life in Washington near the shore is in danger from the potential use of Sonar and other violent explosions under the water. Munitions are hazardous to living organisms. This area is a marine sanctuary, not just in name.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Govedare-02	2) I am also very concerned about the depleted Uranium that is being introduced into the water and the seabed. This is likely to spread radioactivity to marine life, and let's not forget that people eat seafood. It is no accident that cancer is on the rise in our culture.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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Govedare-03	I am very worried about all the heavy metals being introduced into our waters; these pass up the food chain and threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Govedare-04	There seems to be a policy of averaging potential pollutant concentrations out over the entire expanse of the huge range complex, which makes levels seem benign. This not accurate, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS (Deepwater Benthic Habitats beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Govedare-05	The possibility of using areas like the Marine Sanctuary for testing, just because it is cost effective, isn't a good enough reason to jeopardize our food chain and disturb preserved sacred areas.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Govedare-06	3) There is no excuse for your EIS documents to be off-line and unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Govedare-07	Other points I feel need addressing are these: 4) There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Govedare-08	5) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.

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Govedare-09	6) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Govedare-10	7) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Govedare-11	8) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that "most, if not all, of
		Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that

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		there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Govedare-12	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Graham, Bob	Outside of national emergencies or war, I think sonar trainig should be done on simulators. Costs less, animals are not injured and I get the multitude of scenerios on a simulator could never be duplicted at sea. Pilots do it, sonar techs should too! Thanks very much!	As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitations to simulated training that necessitate live training, such as that in the NWTRC.
Graham, Beverly-01	"I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine sanctuary, no less, and I emphasize the word sanctuary.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Graham, Beverly-02	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, bad enough in itself, but some of it people eat, even worse.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Graham, Beverly-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Graham, Beverly-04	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations
		based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials

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		taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Graham, Beverly-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Graham, Beverly-06	There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Graham, Beverly-07	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Graham, Beverly-08	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Graham, Beverly-09	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Graham, Beverly-10	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are

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		located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Graham, Beverly-11	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary. I am a grandmother. I want my grandchildren to grow up with a planet that is intact and thriving. These tests are not good stewardship of a fragile underwater eco system and marine life. Please stop killing our whales and dolphins.	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Grant	I oppose the Navy's use of mid-frequency sonar in the waters off of the Oregon and Washington coasts. It has been linked to adverse effects in a number of whale species, some of which are endangered. These effects include hemorrhaging around the ears and brain of the whales, what must be a truly excruciating experience. I hope that, with our modern technology we can find a safer way to locate possible enemy submarines. Thank you for your time.  Kevin Grant	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training

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		exercises as proposed in the Draft EIS/OEIS.
Greenlee-01	1) I am writing to you as a concerned citizen of the state of Oregon. This is simply too big an issue to allow only one or two hearings.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.
Greenlee-02	2) Also, the Supreme Court rulings in California notwithstanding, I do believe the marine mammals who inhabit the entire west coast could be in jeapardy from unwarranted radar sounds. Since their entire life is dependent on sounds within the ocean, I really object to the navy putting them at risk.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Greenlee-03	Surely there must be other areas that are not so sensitive where you can "practice" radar training.	Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Greenthal, K.	Attn: Mrs. Kimberly Kler – NWTRC EIS/OEIS:  It has just been brought to my attention that the Whidbey Island Naval Air Station is planning to double the number of sorties (training flights) under a new plan. This plan could seriously affect the frequency of flyovers, particularly on the south end of Lopez Island where I live. I am distressed about this, for already the noise of the current tests has severely disturbed the quality of our lives here. I am a writer and depend on the quiet that attracted my husband and myself to live here some years ago. While I understand the importance of your mission, I ask that you respect the residents who are so severely impacted by the disturbance your tests create in our day to day living. Please change your flight patterns away from the islands! Thank you.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.
Greenthal, S.	Attn: Mrs. Kimberly Kler - NWTRC EIS/OEIS  Dear Mrs. Kler,  I have recently become aware that the Whidbey Island Naval Air Station is planning to double the number of sorties (training flights) under a new plan. This plan will seriously affect the frequency of flyovers, particularly on south Lopez Island where my wife and I live in our long time home. I am a professional musician, who has built a recording studio in our house. During training periods, it is impossible to pursue my work because of the extreme noise generated by the flyovers. This is in addition to the disruption of our personal lives and well being. My wife and I have tried to accommodate to the Navy's legitimate mission of conducting training exercises- however at great personal and professional sacrifice. The future prospect of doubling the	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.

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	number of flights is intolerable. I urge you to reject the proposed expansion, and even further, that the Navy reroute its present flight path patterns farther away from Lopez Island.  Respectfully,  Stanley Greenthal	
Grigg	I have just received notice via a friend's email TODAY, the final day of commenting. This is unacceptable. Why was this not in the Fort Bragg Advocate News, the Mendocino Coast Beacon, or the Santa Rosa Press Democrat, our local papers? I am sorry but until we learn more about what you are planning, we must protest and say that we are 100% against any proposal whereby the local citizens are not informed in advance.	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  Meeting locations and notifications were focused on those areas within the range complex, with potential impacts.
Grover	I am deeply concerned, not about taining, but about where and when you are training. As the director of the Whale Watching Center, we track whales every day. We have whales along our coast every month of the year. Some of those 7 kinds of endangered and threatened whales feed or travel with our whale watching tourists and our fishing tourists which make up the bulk of the economy of our coast.  Any activity with regards to Sonar which NOAA acknowledges does harm marine life, would be of significant impact to our economy. Even one dead whale on the beach would taint anyones vacation.  We have great records with daily counts going back for 6 years of whales and visitors. We have 31 years of records for specific weeks of whales and visitors  We can tell you who's out there, when they are out there, and how far from shore. We have statistics on whale watching visitors from every state in the US, and every county in the world. Whale watching along the coast is the life of the Oregon coast. We depend on those visitors for our livelyhood.  Please contact us for detailed information. It means everything to us. Call me anytime at 541-765-3304.  Thank You Morris	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS. Section 3.14.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Gubelman	In the long run if we destroy everything around us we are not protecting ourselves as a species, just our individual self and our ego (also known as pride). To care for our body, our immune system stays alert and likes to be stimulated, but carefully chooses its battles. PLEASE respect the life around us and don't assault it with your "tests"	This comment has been duly noted.
Guimond	I am opposing to increase the flying of navy jets over the San Juan Islands.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Gutride	This project should not be approved. There has been insufficient environmental study and the environmental risks are not warranted by the	This comment has been duly noted.

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	alleged gain from the project. Less intrusive methods can and should be utilized.	
Guyot	Please do not increase flight times for training or any other reason at NAS Whidbey. This training, with it's resulting noise has a negative impact on humans and animals, both domestic and wild. It is particularily disturbing in the evening hours when one is awakened from sleep by these jets. Those who rise early to work need their rest, as to seniors, children and students. It is therefore a hardship to endure more training flights.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
Н.	PLEASE DO NOT use sonar testing in ocean waters. It has been made CLEAR that this testing DESTROYS wildlife in the waters for miles around it. Our wildlife is precious and every step should be taken to preserve it. we are smart enough beings to find other methods of conducting ourselves that are safe for us and the world around us. The resident pods of Orcas in Puget Sound are Stunning, Amazing and Awe Inspiring creatures. I have been so fortunate to have had several experiences viewing them up close - seeing them breach - hearing their calls - watching them interact with each other and	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
	with our boat. These experiences that I treasure changed my life. Positively changed my Heart. I have taken several of my loved ones to experience the Orcas and their lives were also positively changed. There is no way to imagine the feeling of being in the presence of these magnificent creatures until you are. Everyone should have the opportunity. I know the people who have would strongly agree with me. PLEASE use our Naval power to protect the Orcas and other sea life, allowing future generations the thrill of continuing to experience them. Thank you from the Sea Life!!! Thank You from Human Life!!!!!	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Haber-01	Attn: Mrs. Kimberly Kler - NWTRC EIS/OEIS March 10, 2009 Greetings: I was recently informed and applalled about NAS Whidbey's to plan to double the training activities departing from NAS Whidbey. I find it stunning that in your comprehensive EIS planning process you have neglected to inform or request comments from San Juan County government and residents. I am a home owner on the south end of Lopez Island. The noise "footprint" from current 2008-2009 activities is very significant. To imagine 2 times the number of aircraft arriving and departing and practicing carrier landing practice into the midnight hours is alarming. Right now NAS Whidbey's noise is a daily impact. The roar from arrivals and departures is heard all over the south end of Lopez Island nearly every day. EA6-B's fly regularly over our school, Lopez Village and our homes. Overflights often disregard the 3000 foot ceiling they are mandated to fly. It is common for flights to be directed far into the county over the north end of Lopez and beyond during busy arrival schedules or weather. We often feel we are living in a war zone. I can only	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.

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	imagine the impact on the whale population. The proposed noise footprint from your alternative two suggests roughly four times the current noise level and when runway 31(?) is in use it would be pointed directly at us and appears to reach into San Juan County. Have you neglected to inform us because we are a small population? Or perhaps you are imagining that the many wild life refuges and preserves along the southern border of the archipelago are of no consequence. I respect your commitment to carrying out your mission. I ask that you respect your commitment to working with surrounding communities and request that you reconsider the proposal to expand the Whidbey operations.	
Haber-02	I favor the no action alternative. Peace and quiet is a major economic value of San Juan County. Visitors from all over the country and the world come to visit our beautiful archipelago and enjoy the geologic, geographic and biological diversity. They usually leave feeling that they have taken a breather from the pace of the rest of the world. They do not come or stay or spend their tourist dollars to experience a war zone. Please respect these islands, the residents, visitors, and marine mammals that will be impacted by the proposed expansion. Sincerely, Patrica Haber 211 Hughes Bay Road Lopez Island, WA 98261	This comment has been duly noted.
Hahn-01	Re: Navy tests off Pacific Coast Please publish a list of the chemicals to be used and their exact harm to the public, animals, marine life, water supplies, trees, agriculture, and soils.	Please refer to Section 3.3 – Hazardous Materials for discussion on chemicals.
Hahn-02	This includes information on whether or not depleted uranium, red and white phosphorus, weather modification and mitigation chemicals will be used, whether or not atmospheric testing will occur along with aviation over-flights and bombing runs.	White phosphorus is not used in the NWTRC and is not part of the proposed activities.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Hahn-03	Will sonic booms rattle our homes and low flights of planes shake our houses and wake us up at night?	Supersonic flight occurs only over water under specific conditions, designed to preclude sonic booms from disturbing people and animals on land.
Hahn-04	I am also requesting complete documentation and information on Electronic Combat Training and how it will impact human health. Noise and electronic levels should also be made public.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Hahn-05	2) Please extend the amount of decision time so that all residents of the affected states will have the ability to respond to your ideas. As American citizens, we have that legal right. It would be prudent for you to give appropriate and adequate hearings to avoid future litigation. Thank you.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could

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		be submitted by mail postmarked no later than the closing date.
		Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Haight	Along with others, I request that you cut back Navy training with sonar devices until you can provide an eis that demonstrates no harm to Puget Sound and Pacific Ocean mammals.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. There is no sonar training within the Puget Sound, only offshore. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hajny	The Pacific North West is due for an offshore subduction earth quake near 9.0 in intensity. The entire coastline from BC, Washington,including Puget Sound, Oregon, and California will be dramatically impacted. The US Navy will respond in assisting in probably the greatest natural disaster of our country.  Incorporating the Navy's role in such a disaster into the public education presentation of the Northwest Training Range Complex will have a very positive affect. The US Navy's role in assisting in the Indonesian earthquake/tsunami can be equated to such a disaster on our own shores.	Navy assistance provided during a disaster as described in the comment would be considered actual operations, not training. Therefore, those operations would be outside the scope of this EIS/OEIS.
Hajny	Speaking of saving the whales. Any way you can detect if a whale has an adversary's monitoring device on it? (I don't expect an answer)	Navy personnel working on this project are not familiar with any such capability.
Haldeman	Please try to eliminate use of Sonar in the perscribed training range, and ideally limit your training range for all surface vessel to a 25 mi. limit	This comment has been duly noted.
Hale	The decision to of the U.S Navy and the U.S. Dept. of Defense to use the Pacific Ocean off the coast of California, Oregon and Washington and land over four states to test weapons of war is a crime against the environment and humans that dwell in this area.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges. The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Hamilton, D.	I urge you to stop using chemicals and electronics that are harmful to the environment and to life. I happen to live right on the water quite close to a navy base. I feel very endangered by this. What you are doing threatens	This comment has been duly noted.

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	the health of humans and animals alike. Please, stop. Nothing good can come of something so polluting and harmful.	
Hamilton, M.	I am very opposed to the expansion of the DoN NW Training Range Complex as there are so very many unanswered questions about the final impact, to the local and regional natural and/or human environment, of this action. Please do not rubber stamp this potentially dangerous project. To do so will further the deep turmoil heaped on our human existence by lack of oversight and regulation. There are existing test area for the use of the DoN. Do not increase the impact of testing new forms of defense, with unknown physical and biological results, by increasing the size of the test range to include entire states and regions. Thank you.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Hamilton, T.	After reading about this proposed testing/training area, your intentions and your lack of discolosure/transparency reguarding this proposed training/testing, all I can say is PLEASE don't do this. I'm not an expert in this field or any related field, nor can I begin to understand the technical repercussions from the exposure of chemicals and detonations to our waterways here in the Pacific Northwest, but I am a Mother and this feels like a complete violation to our earth. Reading about this from a lay persons point of view gives me a stomache. People who are experts in Marine Biology, Envioronmental Science, Earth Science, etc. need to have an opportunity to weigh in on this issue. Our government (my government) has an obligation to solicit information from these experts on an issue of this magnatude. Please think of the long term consequences to our planet. I do not want this kind of testing here on the West Coast, I do not want this kind of testing to go on anywhere on the PLANET. It's time for a new paradigm: PEACE. Please do not disreguard my view point, surly I am not alone in this world view. PEACE.	This comment has been duly noted.
Hammerstrom	The Fort Bragg City Council would like to request that the United States Navy extend the comment period for the Northwest Training Range Complex EIS for at least an additional 30 days and that a public meeting be conducted in Mendocino County, California to provide public information about the project and to obtain comments from interested parties.  We believe that the public notification regarding this project was inadequate and evidenced by the fact that the City of Fort Bragg was not notified of the February 2, 2009 public meeting held in Eureka, California. Furthermore, a copy of the Draft EIS has not been made publicly available at any location in Mendocino County, despite the fact that the Northwest Training Range Complex includes areas off of the Mendocino County coast.  Please understand that our community is vitally concerned about activities in	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions

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	coastal waters that may have an impact on navigation and/or marine resources. We request that additional time be granted to allow interested parties to comment on this project. (hard copy of letter, with signatures, is being sent FedEx today)	within the constraints of a limited public notification budget. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.  Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F. Finally, the Draft EIS/OEIS has been available for download since December 2008 from the NWTRC EIS website at: <a href="http://www.nwtrangecomplexeis.com">http://www.nwtrangecomplexeis.com</a>
Hammond	Why would Oregon, Washington, Idaho and California be OK with the Navy using our land upon which to practice? Hazardous materials and chemicals will be released and affect human life in the long run. Why is this believed to be a good idea?	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below. Section 3.3 Hazardous materials Section 3.16 Public Safety
Hanke	I totally agree with Rosaland Peter's assesment of the degree of threat this proposal well may be to our environment. It certainly warrents a FULL disclosureand much more time for citizens, and scientists particularly, to evaluate toxic materials, sonar explosions, whatever is the real and long lasting result of this plan. Having lived 'downwind from Hanford' (in the 60's and 70's) and witnessed the tragedy of many young people, a number of neighborsdestroyed by 'cancer', (one family member being a thyroid cancer victum)how can we as citizens, again, agree to being 'test sites'??? How can we allow our valuable species (salmon, orca, etc.etc.) we are working diligently to preserve, our WATER and our AIR be compromisedin any way????	This comment has been duly noted.
Hannam	I am really disappointed in the navy, trying to sneek further use of sonar and trying to extend use of weaponry that is so proven detrimental to living organisms from smallest to largest and some threatened and endangered,,,,,,you guys don't seem to understand that these resources are both yours and mine and need protection from all threatsI would have this be your highest calling from now forward,,,, These are my orders to the navy from now onJWH.	This comment has been duly noted.
Hanson-01	I am outraged by your proposal to increase military training activiites in the Pacific Northwest Training Range Complex. As a resident of Olympia, I know I will feel the effects of this change in Puget Sound. The water will no longer be quiet and peaceful, and numerous aquatic wildlife will be murdered. Furthermore, some of the areas included in this proposal border the Olympic Coast National Marine Sanctuary, and all of the areas included are habitat to nine ESA-listed marine mammal species, three threatened salmon species, more than seventy bird species, and countless other animals that are depending on those areas for their home. These animals depend on this habitat for breeding, feeding, navigating, and avoiding predators, in short, for their survival.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.  The training that the Navy proposes is essentially the same as has been conducted for decades in the NWTRC with no resulting injuries to marine mammals or destruction of habitat.
Hanson-02	If implemented, the Navy's plans will intensify the level of noise, violent explosions, and hazardous materials released into our already beleaguered environment. Pollutants that will be expended in the proposed exercises include a long list of heavy metals and chemicals such as	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the

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	depleted uranium, lead, mercury, and perchlorate.	Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Hanson-03	The proposal also includes plans to escalate the Navy's use of active sonar, which has been implicated in marine mammal injuries and deaths. I can't help being reminded about what happened on the Puerto Rican island of Vieques, part of which was turned into a Superfund site by Navy activities that contaminated it with hazardous waste. Will this also be the fate of our seas? There is much at stake with this proposal. I urgue you to closely consider the fate of our environment and all of its inhabitants (both wild and human) when you decide whether to implement this proposal. Thanks very much for your time and attention.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Harden	To whom it may concern  As a long time resident of Mendocino county (40 plus years)I have enjoyed the natural beauty, pristine coastline and bounty this area has to offer.  Opening this coastal area to Navy training is something I cannot support. I understand the need for well trained troops in all the armed forces. Please consider reopening a military base previously closed in Calif. that could be used for this type of training. Thank you for listening. Richard Harden	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
Hardin	I strongly oppose the Navy's planned training exercises off of the Northwest U.S. Coast. Our coastal environment suffers too many impacts from overfishing etc. already. The Navy will release many toxic substances that will disrupt the marine ecosystem. Low frequency sonar, explosions and other activity has been shown to have a detrimental effect on marine mammals and other creatures and the long term effects of these exercises are not understood. The Navy should not turn our beautiful coast into a toxic dump like they did in Viequez.	This comment has been duly noted.
Harris, A.	Hello, I'd like to ad my views on this subject. I realize it will make absolutely no difference in the final decision, but perhaps, someday, someone might listen.  The military has an extensive history of ignoring the impact that vessels and war games have on the ocean. You do still toss trash into the sea, right? I can recall trash being dumped from the stern of a destroyer 50 years ago and I suspect the only thing that has changed is the decomissioning of vessels and the addition of new ones. At any rate, I'd like you to stop doing that. I'd also like you to stop using intelligent creatures as vectors for explosives. I could go on and on, of course, but the bottom line is no, we don't want you to be out there playing training games and increasing the damage to coastal waters. Maybe you could have them along the Somalian coast and give your trainees the experience of dealing with pirates in small boats instead? Just a	This comment has been duly noted. There is no trash dumped off any Navy vessels today. The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.

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	thought.	
Harris, J.	Low flying aircraft was a major irritation during the Central American wars of the 80's when navy pilots trained over our beautiful, peaceful hills. Now you also want to explode weapons or charges in the waters off the coast, potentially damaging whales, dolphins and all the lesser mammals and fish. You may affect the salmon and steelhead at sea, contributing to their further demise. In God's name STOP. What is wrong with you? You've got an island in the Santa Catalina chain that you blow the [expletive deleted] out of that you don't even show on maps Keep [expletive deleted] that one up and leave the rest alone. You need to be in the water yourself when an explosion goes off near you then tell us how harmless it is. Won't you volunteer to be a test subject if you believe so fully in the good you think you're doing? There may be people in boats resisting your senseless testing and a taxpayer revolt because you're a waste of taxpayer money when you go overdoing this. Rewrite your EIR! And I don't mean to your "It's this or worse" choices. Back off and figure a less intrusive way. The public comment period needs to be extended another month because this has been under the radar and you are guilty of hiding the truth and trying to slip this by the public. This will reflect poorly on your record of service and it will be remembered and pointed out to all your superiorsTo the President himself. Remember Obama grew up by the sea and knows the precious life it holds. Think about it: Public protests pointing out your cavalier attitude toward the public and God's creation of the sea. Tax revolt to cut your budget, Career-damaging PR for Navy brass. Get reasonable and hear the public now! It's just beginning. The oil lease sale in 1988 was canceled because of public protests AND it's time the government had anothe [expletive deleted] 'kicking!	This comment has been duly noted.
Harris, P01	The Pacific Northwest needs LESS, not MORE militarization of its public spaces. While the US Navy has a heroic record of defending our country in times of true crisis it also has a tragic record of mismanagement, especially when it comes to environmental impact. The Puerto Rican island of Vieques (which is now a SuperFund site) is just one of many examples. The ideology that we "own" nature (likely originating from a misinterpretation of Scripture) is under serious assault. There is no scientific debate that the eco-systems of our entire planet are threatened with imminent collapse. This collapse is not an abstract idea, but a practical reality and one that is of greater risk to our "way of life" than all other enemies combined. This is not just the opinion of tree-hugging environmentalists, but the Department of Defense, in papers issued about climate change and other environmental issues. To sum up, we need LESS, not MORE massive use of our natural resources and habitats being used to test weapons systems that look good on paper but have no practical use.	This comment has been duly noted.
Harris, P02	There is no longer a superpower to defend ourselves against, so why the continued expansion of systems and technologies to fight a non-existent enemy? I will end this comment by quoting one of our country's beloved Presidents: "Every gun that is made, every	The global proliferation of extremely quiet submarines poses a critical threat to the maritime interests of our military alliances and allies. The military use of sonar, and the ability to test and train with it, is critical to U.S. operational readiness and our national defense. Indeed, the national

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	warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed." - President Dwight D. Eisenhower, 1953	security interests of many nations require that naval forces be able to train with, test, and employ active sonar.  Military training now is critical to ensure preparedness should our forces be called into action. We cannot in good conscience send American men and women into potential trouble spots without adequate training to defend themselves.
Harrison	Please do not disrupt the peace of our island with your fly-overs. Using this routing is unnecessary and very disruptive. You have the whole ocean to use!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Hartmann	I moved to San Juan Island for its beautiful quiet and for its distance from urban and international conflict. I am involved with trail building and park maintenance on the island for the enjoyment of local residents and the visitors who share the clear air and quiet environment. Some days the sound of Whidbey Island fighter jets training over the area creates a constant disquieting din. I don't like it! Thanks for listening.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Hartzell-01	As a journalist who covers this issue, I am not going to take a stand on the proposal itself. My comments are critiicms of a flawed information and communication process. The Navy failed to communicate what this plan was and to deliver this information to parties who needed to know. To me, it appears the Navy hired a high priced PR firm who put up a fancy website and did nothing to get the word out. Members of Congress were not contacted, nor was the press, nor was local government. Yipes! That's awful. I believe that the Navy would have done better handling this in house. The old approach of a sailor in white and a chalkboard traveling to the communities would have gone over better than a website that seeks to sell, not inform. People would have loved to hear about this in this way. There was much positive about this EIS, lots of cool information that could be valuable to local communities up and down the coast. The Navy told us about something most of us didn't even know had been going on since World War I. But a concise statement about exactly what has been happening was needed. And the proposal lacked sufficent detail for me to understand the basics of who, what, where and why.  Right now it looks as if sufficent studies have not been done. Possibly if better communication happens during the process those studies will be identified. I believe the Obama administration is pushing openness, cooperation and reductions to needless outsourcing. As this process continues I hope the Navy will also move in this direction. We don't need to know how weapons work or military secrets. We do need to know everything the Navy learns about the effects on the environment, whales, salmon, shrimp, seaweed, currents etc.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  Also, notifications of the meetings were delivered to a number of organizations, agencies, and State and Federal elected officials as described in Appendix F.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.
Hartzell-02	There is a tremendous push to use the ocean for energy development at the	Mendocino County and its coastline are outside of the range complex,

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	same time as the ocean is becoming increasingly polluted and even frail. By cooperating with other federal, state and local agencies the Navy could help the country in more ways than just needed military training. For example, an underwater dummy minefield is to be constructed. Why not use that construction to also do research on offshore wind technology? Or current studies on currents, wave energy etc. My experience is no consideration is given to this kind of thing. But we live in a world being changed by economic and energy forces as much as military. I hope the Navy realizes this and creates a process that is open, instructive and cooperative where possible. Just because you don't have to doesn't mean it isn't your duty to do so. I would also like the Navy to hold a meeting in our community, which is Mendocino County. I'd like the Navy to communicate with the local city council and board of supervisors about what they are doing. I'd like to see a printed copy of that 1000 page document shared with the libarary in Fort Bragg. There is much valuable information about ocean life and systems. Thanks for considering my input.	and therefore not part of the proposed action.
Harvey, A.	Please halt this unbelievable idea to turn the Pacific coast into a firing range! At the least, please extend the comment period for at least several more months, as this idea needs to be considered fully by, in particular, marine biologists so that the opposition and full implications and potential impact that we all know exists is able to be communicated so that this plan can be defeated. Please halt this plan!	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Harvey, E.	PLEASE do not expland military target practice area to include most of the west coast of the United States! As a citizen I want to protect my right to go to coastal areas, especially protected wildlefe areas, without great risk of being shot by our military. PLEASE DON'T DO THIS!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Harvey, T.	I wholeheartedly object to the planned expansion of training grounds along the Pacific coast. The plan will have drastic and unexpected impacts on local quality of life and marine life.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Harvey-Utes	It is with total understanding for the need of training and our countrie's security that I respectfully ask, that the U.S. Navy and its conterparts, seek a less damageful set of areas to do the training that is needed to ensure our safety. Please I do not want to come off as some environmental agitator. But As Humans, We do not live alone on this Planet. And it is time we stop making excuses for harming and killing the unarmed species that help balance out all the mistakes we have made in regards to Our and Their only home. Every year since Bangor Navel Base has been established our marine life in the Hood Canal has decreased. As a ex-military person myself, I do realize the importance of the base and it's activities. However, we still need to address the issues of how to perserve our Children's legacy and our Planets balance. And if not the Great Instituion of our Military to start that prosess than Who Will. Please for all our sakes, reconsider the locations for the training that is needed.	This comment has been duly noted.

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	Marci M Harvey-Utes.	
Haskew	I'm alarmed to hear that the Navy may resume using sonar in the same waters as our endangered Orca whales knowing as it does that the use of sonar can severely impact the behavior and well-being of whales. I hope that common sense and the Endangered Species Act will prevail and that the navy will find other ways to train without harming our majestic neighbors.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hastings	Based upon the record of the US navy, upon the navy's disregard for the environment I've directly witnessed, and based upon the desire to stop the navy from further environmental bad practices, I'm totally opposed to this training. I've seen the results with my own eyes and no amount of sincere rhetoric nor pleasing promises can change the navy's history. It is long past time to develop other methods of conflict management that don't involve guns, bombs, nuclear boats and ships, and militarism.	This comment has been duly noted.
Hatch	to whom it may concern, the letter i just read about increased naval training off our shores and thoughout our land made me sick.the airforce will be ablr to have bombing execices off our shoe,and we are not able to fish thereis appalling,to here jets do traing disrupting our beautiful land is frighting.i as a concerned citizen of shelter cove am not for navel traing or any other types of training for it.	This comment has been duly noted.
Haverfield	i am opposed to the navy expanding it's operations along the west coast turning it into a firing range.i am opposed to more activities like combat maneuvers,missile,gunnery,warfare,and training exercises.i am against any more activities that upset the environment and pollute the ocean.in my view we need to do less of these . thankyou, heather haverfield	This comment has been duly noted.
Hawley	I object! What we need is better foreign policy, not more war games.	This comment has been duly noted.
Hayden	If I weren't a terrorist before then I certainly am now! Support the troops??? [Expletive deleted] you!! You all are insane!! There is a special place in hell for those who are raping this earth and killing the innocent creatures that can't fight back. Never mind that you are ultimately killing us allever heard of the food chain you dumb [expletive deleted]???	This comment has been duly noted.
Hays	The proposed training activities threaten significant harm to orca populations& does not adequately address potential impacts to Puget Sound. The proposal ranging from increasing missile & sonar testing to dumping depleted uranium, should NEVER be considered. rather it should be an opportunity to figure out how to train in the MOST ENVIRONMENTALLY SENSITIVE & THOUGHTFUL ways.  PLEASE PLEASE DO NOT GO FORWARD WITH THIS DREADFUL	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the

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	PROPOSAL. PLEASE SAVE US FROM OUR OWN DISASTROUS DECISIONS!	Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Heald	My husband and I live in the landing pattern for Whidbey Island NAS and the landig of planes at the NAS is often deafening. It is especially bad when several times a week in the Spring Summer, and Fall the NAS starts landing planes at 2230 hours EVERY TWO MINUTES until midnight. I have to get up at 0430 to go to work and the landing of plans so late at night and so constantly makes sleep impossible until it stops. This interferes with my ability to perform my job. and the hotshot Top Gunners who joyride into the base at high speed on beautiful afternoons strongly adversely affects the quality of our lives. LOts and lots of people live in your landing pattern and what is being doneis just awful and there seems to be no consideration for all of us who live here. The Growler is reportedly even louder than the planes we put up with now. I BEG you not to increase flights. Not only will this cause noise polution, it will also cause additional air and water pollution. The exhaust from these planes is not harmless. It is damaging to the air we breath and to the wildlife that lives here on Skagit Bay and in our waters. I ask for LESS flight training, not MORE. Thank you. By the way, I work with someone who lives in Oak Harbor and he says he doesn't hear the planes. Well, HE doesn't live in the landing pattern.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Heberer-01	I am in favor of the "No Action Alternative" and oppose: the Navy's testing of depleted uranium weapons anywhere	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Heberer-02	the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
Heberer-03	invasive testing of any kind in a underwater sanctuary	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Heberer-04	testing of any kind without independent environmental impact research	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.

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		The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.
Heberer-05	testing without viable citizen oversight of environmental compliance.	Civilian oversight and control is in fact a foundation of the U.S. military. As Commander-in-Chief, the President of the United States, a civilian, makes ultimate decisions about the training and operations of all U.S. military forces.
Heberer-06	Please take all actions necessary to protect and restore our fragile marine ecosystems - as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.  Thanks for listening.  David Heberer	This comment has been duly noted.
Hedal	This is a complete transgression of components of the Constitution where the Government is taking control of Public lands and especially without due recourse.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	Since this Public land grab has been so covert in its inseption it is only fitting that an extended comment period be provided to the affected States. This is a violation of States rights at very least.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Heiler-01	I have been a resident of the Pacific Northwest for most of my life and am appalled that our very own military would endanger the life of so many creatures with the use of sonar and underwater explosions, etc. As a taxpayer, registered voter and citizen, I must say that this is not only unnecessary, but also unconscionable. What global warming is doing to our environment isn't enough? Leave the ocean and it's life in peace. PLEASE.	This comment has been duly noted.
Heiler-02	As a United States Army veteran I served my country and I approve of and understand the need to maintain military training and readiness. As a former member of the military I also have an extensive understanding and knowledge of the current threat to our nation and the necessity of changing the focus and the structure of the military to meet this threat in the proper manner that will insure the security of the nation. To me this expansion is an unnecessary expansion of conventional means to meet the threat of today. The navy it seems is too focused on fighting the current threat with outdated means. This expansion is a waste of resources and taxpayers money that could be directed elsewhere. In a time of grave need this is an action of negiligence.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Heiler-03	This expansion also is one of environmental irresponsibility. Until the impact of man made sonar on marine life is clear we can not take such actions. It is	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of

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	evident that such sonar activity may be responsible for mass strandings of whales and others. Until this role of sonar is clear or until we are able to mitigate this impact with other technology it is not in the best interest to proceed with expanding such activity. The same is true for underwater demolitions activities. There is too much uncertainty in regards to the science involved for this action to take place. If the navy truly has the nations best interest at heart and is really concerned over the impact of its activities it will cease this action and place its emphasis elsewhere in the proper place to meet the current threat. Thank you.	injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hein	I would hope that our State mandated Puget Sound Partnership will have plenty to say about your proposal, we are trying to clean-up Puget Sound, not add a lot of your "insignificant" ropes and buoys that will be "covered by sediment" eventually. That's not good enough. Additionally, sonar DOES cause problems with our marine mammals, proven. It's not possible for you to always know where the mammals are since so many of them are silent stalkers. When your planes fly from OLF I've watched shore birds (black turnstones) almost go berserk when the planes fly over them, the noise is just TOO LOUD for these poor birds. What inspiration do we have to help restore our coastline and Sound when you so blatantly disregard the rules? Our whales can't take any more abuse, your plans call for training exercises along the coastline from Calif to Washington, whale migration routes. How are you going to avoid harming them? And how do you control who's harmed by all of those explosives? Would you jump in the water when they're being detonated? I don't think you should be undertaking these exercises at all. I hope our new administration will shoot down these huge risks you're suggesting to our marine life - our oceans need all the help they can get.	The U.S. Navy has conducted underwater detonations training and midfrequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Helbig	Please, contact me - I found a posting on Live Journal by someone who seems to have dug rather deeply to find that the Navy will be using Depleted Uranium (7,200 Phalanx rounds - and DU has been phased out, so how many of these could possibly be DU) and White Phosphorus - both of which are big activist buzz words since claims were made against Israel after recent actions in Gaza. I thought that I could readily find this, but I did not, so I am wondering just how deep that this person needed to dig. Thank you.  His response comment was  "You probably should have looked at that environmental impact study I posted a link to. It answers your questions.  "Close-in weapons systems (CIWS) use 20 mm cannon shells composed of both depleted uranium (DU) and tungsten. DU is "depleted" in that is has one-third less of the isotopes of U-234 and U-235, making it nearly 60 percent less radioactive than natural uranium. Each 20mm round weighs 9 ounces (253 grams) of which 2.5 ounces (70 grams) is depleted uranium. The Nuclear Regulatory Commission (NRC) approved the Navy's license application which clearly stated that CIWS DU rounds would be fired at sea and not recovered.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  White phosphorus is not used in the NWTRC and is not part of the proposed activities.

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	The Navy is currently phasing out use of DU rounds because of the superior flight characteristics of tungsten and its performance against missile casings."	
	There's several pages about DU, actually! Mostly claiming it's not an environmental concern because it's so far away from humans. According to the Navy, when these shells find their resting place on the sea-floor, the radioactivity will magically disappear after "several years" with no impacts on surrounding life. They're firing 7,200 20mm shells during the exercise.	
	As for WP, "Marine markers are pyrotechnic devices dropped on the water's surface used in training exercises to mark a surface position on the ocean surface. The chemical flame of a marine marker burns like a flare but also produces smoke." The impact statement, upon doing a search, does not talk about WP except in a Water Solubility chart.	
	Read the Resource titled, "Hazardous Materials" under documents, although the WP & DP don't seem to be a particularly large threat, there are several concerning things, like the 58,500 .50 caliber rounds they're firing, "As they corrode, these materials would release small amounts of iron, aluminum, and copper into the sediments and the overlying water column."	
Helenchild	As a taxpayer in skinny times, I am appalled by the waste of my dollars on the ridiculously low-level threat of submarine attack. As a coastal resident, I resent visual & auditory intrusion of war games into this peaceful, scenic area; local economy absolutely depends on these values. As a citizen of Planet Earth, I am greatly concerned about predictable impacts on ocean & air life forms, damage to food resources in a time of climate change, worldwide hunger, & global environmental degradation, & blatant violation of the Precautionary Principle. As a daughter of a WW II Navy veteran, I am disgusted with the plan, feeling more attacked than defended by the Navy!	This comment has been duly noted.
Hemmerich, J.	We support our military and are grateful for everything they do and their sacrifices but please, please, we moved here for the peace and quiet and scantity of the islands, not to hear the roar of planes.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Hemmerich, L.	Noise above San Juan Island is already above what any person woulkd want.  Additional flights that would increase the noise level would be detremental to us and native life	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Hennessy-01	I am writing to strongly urge the U.S. Navy to stop unnecessarily injuring and killing endangered whales using mid-frequency sonar during routine training exercises.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating

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		broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hennessy-02	There is mounting scientific evidence that the Scientific Committee of the International Whaling Commission calls "overwhelming" which suggests that high-intensity sonar is the cause of mass strandings and whale die-offs around the world. Endangered whales should not have to die for the sake of military training.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Hennessy-03	I ask you to immediately adopt common-sense measures to keep whales safe from harmful sonar, which include: ~Identifying low-risk areas for routine training ~Consistently establishing appropriate safety zones around ships transmitting sonar ~Reducing the source level of sonar signals at nighttime and in other periods of low visibility As a citizen, who is deeply concerned about the welfare of endangered animals, I call on the Navy to obey our environmental laws and safeguard marine mammals in the course of routine training. Thank you for considering my comments.	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Some restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Henriksen	To: Naval Facilities Command Northwest Silverdale, WA I have lived on Lopez Island, a short distance form Naval Air Whidbey, for over 30 years. I appreciate that the Navy insists on rigorous training for its pilots and I appreciate the Navy's role in national and global security. I have concerns about the proposed expansion of training at the Whidbey Island base and the Navy's disregard for input from one of its closest neighbors, Lopez Island. For several decades we have listened to and tolerated the Field Carrier Landing Practice, as well as the jet engine testing, from Ault field, Whidbey Island NAS. The A-6's and EA6-B's are extremely loud, will drown out all conversation and literally rattle our windows as they fly overhead. The engine testing across the water has driven people to move away from the south end of the island. Many times, my infant daughter was awakened from her afternoon nap in tears and in fear as the jets thundered overhead. Lopez Islanders met with Naval Air Widbey command a number of times over the years. We found that they were unaware of the paths that the jets were sometimes taking over Lopez Island. To their credit, they suggested that the jets stay above 4000 feet when flying over the islands and avoid overflying Lopez Middle and High School. I did see some copmpliance with those guidelines but, as the Command changes on the base on a regular basis, so did the attention to these overflight protocols. I still see jets regularly flying well below 4000 feet, which results in deafining noise for a long period of time. Whether the Navy expands operations or not, I would like to see a guarantee that jets will stay well above the Island if they have to fly over us; that they do not fly over the school and that these protocols be standard procedure and taught to each pilot before they commence training. I noticed that a Navy jet crashed in San Diego this past summer, killing several civilians. I would hate to see that occur anywhere let alone Lopez Island.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.

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	meetings on Lopez Island. We are only 3 miles away from Ault field! Respectfully, Paul S. Henriksen	
Hepokoski	Public involvement in government decisions is a keystone of democracy. The public notice and comment period for the Northwest Training Range Comple Draft enironmental Impact Statement are insufficient to allow the kind of citizen involvement necessary for sound decisions by the government and should be extended at least 30 days. The health of our oceans and marine life are too important to not have adequate notice and public involvemnt.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Herndon	I support your activities and efforts to keep our country strong and defend us with well trained pilots. Go Navy!	Thank you for your comment.
Herrick	I request no testing of any toxic substances or explosive off the waters of Washington State. The environment is all we have. Do not damage any marine life with your tests in Washington.	The Navy is not 'testing' new weapons, toxic substances, or explosives within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Hertel	No complaints whatsoever! Love seeing the jets do their work and knowing that the crews are getting the training that they need. I'd ask that you do the occaisional low pass over the island but some of my neighbors don't feel the same way.	Thank you for your comment.
Hicks	I disagree only with those who oppose your plan. Your activities are needed and I enjoy watching. I had an "unknown" put a flyer on the window of my car hoping I am certain that I would register comments opposing.	Thank you for your comment.
Higbee	My family and I have lived in the METHOW VALLEY all my life and look forward to the planes. Keep up the training if this keeps us safe bring it on. The crabby panty people who have moved here bch about everything from some one stepping on a plant to deer dieing in their back yards because they are now pets(pests) and can not servive on the forage that the people provide the deer. Keep the plans flying - We love it and they are fun to watch. GOD BLESS AMERICA! WE SUPPORT YOU SUPPORTING US, THANK YOU SO MUCH!	Thank you for your comment.
Higgins-01	This is my protest to the navy and its training activities in the Northwest Training Range Complex, including the north end of Admiralty Inlet and eastern Strait of Juan de Fuca and much of Washington, Oregon and part of California coastlines, including the Olympic National Sanctuary.  I completely agree with Orcanetwork.orgs's evaluation of the situation and want to add my voice to their words.	This comment has been duly noted.
Higgins-02	I have read all the explanations and reasoning behind these training activities and I do not agree that adequate measures have been taken to protect and monitor the biological inhabitants of the area. INCLUDING humans and orcas. Explosives and sonar not only endanger and harm wildlife but also	The U.S. Navy has conducted underwater detonations training and mid- frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the

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	human life. Pollution and quality of life included. Two new orcas calf were just born to L and J pod. The whale population is diminishing.	NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Higgins-03	I see no legitimate justification for these training activities. While I recognize the need for readiness through training, the No Action Alternative is all that I can support due to lack of information available to assess the impact on numerous endangered and declining marine species, especially with proposed testing of new systems.Personally I can't see why it needs to done at all. Or why it needs to be done in such a sensitive area? The challenge is to halt the need for these training exercises altogether, which is a problem of international relations and diplomacy. President Obama and Sec. Clinton can prevent this particular travesty by ending US government complicity in global corporate criminality, thus fostering improved international communications. It can't be that hard. Diplomacy begins at home.  Sincerely, Kathleen Higgins, Dry land inhabitant of Puget Sound	To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The broad objectives set forth in this document are both reasonable and necessary.
Hill	I personally think the more military presence the betteranywhere & everywhere, but especially the USA!	Thank you for your comment.
Hill-Keeva-01	I am strongly AGAINST the Navy's plan to expand operations in Puget Sound. The increased testing is a detriment to all marine life as well as human life.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action calls for continued training of Navy personnel with
		established weapons systems, similar to what has been conducted in this same area since World War II.
Hill-Keeva-02	Toxic materials, explosives and explosive residue, etc will be very harmful to the fragile marine environment. It is well documented that sonar testing is killing whales, dolfins, seals due to "scrambling" their brains which ultimately leads to their death by "beaching themselves" or other horrific ways of slow torture. The waters will be MORE polluted making fish toxic. Depleted uranium is harmless??? How can you even say that with a straight face. The Navy is killing Puget Sound and death is working its way up the food chain to humans. Knowing the Navy is so reckless with our fragile environment (Puget Sound) is beyond belief. I want to support our troopsbut this is NOT the way.	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below.  Section 3.3 Hazardous Materials Section 3.4 Water Resources Section 3.6 Marine Plants and Invertebrates Section 3.7 Fish Section 3.9 Marine Mammals
Hiltner	ABSOLUTELY NOT! Peace is made by making peace. Turning those weapons into plowshares requires no testing.	This comment has been duly noted.
Hodges	DO NOT ALLOW THE NAVY TO FURTHER USE THE OCEAN FOR Experimental Warfare at the expense of the 32 species of Marine life!!!! NONONONONONONONONONONONONONONONONON	This comment has been duly noted.

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	my 'protection?' nononononono!!!!!!!Stop this next assault slated for 'voting on April 13th!	
Hoffman, S.	I am a resident of the San Juan Island located across the channel from this Naval base. We live in this island community at an enormous cost so that we can be removed from the activities of mainland life, so that we can enjoy the peace and quiet. It is already disruptive enough to deal with the noise of the current schedule of drill performed by the Naval base but to increase the duration and noise level in addition to using live ammunition is not acceptable. It is an assault on the environment and on us as citizens. In this economy we should not be increasing expenses involving defense, we should be focusing our money on 'green' jobs and repairing our environment, not death and destruction. I do not support the the proposal from the NAS Whidbey base and do not want to see more of my tax dollars spent on disrupting my peace and quiet, please do not allow this type of activity to increase.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Hoffman, W.	I am writing on behalf of the MidCoast Watersheds Council to request an extension of at least 30 days for the comment period on the draft EIS/OEIS for naval training operations off the coasts of Oregon and Washington. We, and other residents of the Oregon Coast received inadequate notice of this comment period, and needs additional time to comment constructively on the Navy's proposals. As you know, the EIS/OEIS contains over 1000 pages of technical material and it is taking us considerable time to read, digest, check and comment on this material.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Hoffmann	It all seems to come down to whether it is really crucial to fly directly over land, rather than over open water. In the past, there was a specific distance planes had to stay away from shore. That margin always seems to get smaller, especially during periods of global stress, which suggests to me that pilots, and whoever is in charge, PREFER to fly over land, and take advantage of the public's increased permissiveness. Can't part of training be to adhere to strict guidelines regarding proximity to population? Surely the skills involved need to be practiced.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Holbrook, D.	I oppose the plan. The resident and migrating whale population is too much at risk. The over flights will interfere with the economy as they will make this a less desirable place for tourism - the natural experience will be seriously degraded.	This comment has been duly noted.
Holbrook, J01	I live along the Oregon Coast in Lincoln City and am deeply concerned about the environmental impact of the training range proposal. A heavily used whale migration occurs off our shores twice a year. In addition, we frequently have whales who stay around for months at a time. We cannot disturb the migration and feeding grounds of these protected animals. Many different species of whales migrate along the coast line as well as a myriad of other sea mammals and bird life.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.

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		Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Holbrook, J02	In addition, an expanded training range would impact our much needed sport and commercial fishing industries. Lincoln County is a rural county with a depressed economy. Our largest industry is tourism. An expanded Navy training range would negatively impact our tourism which is heavily dependent on wildlife (i.e. whale watching and bird watching), sport fishing, and the general beauty of the coast. We could also not withstand an impact to fishing. Finally, Lincoln County boasts the Hatfield Marine Science Center in Newport where important marine research is carried out along the coast. We are also a finalist as a new site for a NOAA research facility. Expanded Navy training would hamper the research activities along the coast. No expansion to the existing training range along the Oregon coast should occur. At least Washington benefits from the economic aspects of having Navy installations, Oregon gets nothing. The Oregon proposal is just a "take", leave us out of it. Sincerely, Jane Holbrook 541-994-7747	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Hollen	I favor the no change alternative.  Please extend the comment period to compensate for your website being unavailable during the comment period.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Holm	Please do not increase activity or extend the range. The sound and vibrations are already deafening. It is so uncomfortable for us humans, I can't begin to imagine the kind of discomfort and dammage it is certainly wreaking on all the other species whose ancient and only home this is. Your web page and video sound so respectful of nature. The only way to prove that you truly are so is to NOT increase the range, NOT increase the activity, and, if you REALLY believe in protecting the natural world, to find ways to DECREASE your activity and make it QUIETER and CLEANER. Thank you for your attention and respect toward the treasured natural species and habitat here. Sincerely, Carla Holm	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Holmes	Please continue to train. Training is Mission Critical to our Military and MUST continue in realistic, all weather conditions to be effective for our soldiers, sailors, airmen and marines to be effective and servive in combat. I would rather hear the occational fighter aircraft fly overhead now than read of one crash or training accident in the news. All the best and THANKS FOR SERVING!!!	Thank you for your comment.
Holz	Navy activities that threaten marine life should not be allowed in coastal waters of Washington State.	This comment has been duly noted.
Homer	If it is indeed true that the navy is planning to run chemical (and	Sonar training is a part of the proposed action. However, there is not

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	sonar) tests in several states, I ask that you reconsider poisoning the environment which could cause serious illness and have a huge negative impact on our food and water supply. This type of chemical testing should never be doneespecially not on our own country. All of us should be doing whatever we can to eliminate existing toxins and certainly not to add more. During the current economic situation it also makes no sense to spend money on any such testing. Please abandon any plans to add chemicals to our environment.	'testing' occurring in the NWTRC, only training with established weapons and platforms. The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Hopkins	There are currently 63 species listed as endangerd in the Georgia Basin. Having a "look out" on the front of a ship is tantamount to wearing blinders to the situation at hand. Of the 63 species listed as threatened or endangered by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants were the most frequent causes listed in status reviews for species declines. Your activities will not only add to the stress of the species discussed but potentially add to their demise. Just today, President Obama overturned the Bush Administration's endangered species rule upon which your requests for increased Naval actions rests its laurels. Allow the scientific process to reign and STOP the upswing of operations. Living on San Juan Island we already have to watch the activities, helpless to the impact. Orcas are listed as endangered thus, legally protected. Your training exercises are illegal! Put a stop now to your unconscionable activities! Sincerely, Jillian Hopkins	This comment has been duly noted.
Hornsby	For what is a man profited if he shall gain the whole world and lose his own soul!Or put it another way: What good is it to have the best navy in the world if we destroy the planet? Geoff Hornsby	This comment has been duly noted.
Hubbard-01	The EA6B Prowler has to be the noisiest jet airplane ever built. When these planes fly over my home on the south end of Lopez Island, I don't really HEAR the noise as much as I FEEL it. The windows shake and there is nothing I can do but wish that they would pick a flight path over open waterrather than over my home. Does a well-rounded training require flying over residential areas? If the primary function of these planes is radar jamming; what training do they gain by flying over my little cottage on Lopez Island? Do you have a target radar installation somewhere out in the country to test the effectiveness of this jamming operation? If not - why not? Best wishes to to our nation's defenders.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Hubbard-02	I have numerous concerns regarding the proposed expanded Northwest Training Range Complex, such as these dangers to humans, birds, and sea life: unhealthy noise levels (both in the air and under water), oil spills, air pollution, collisions with living creatures (air and ship strikes), hazardous shocks from explosions. All of these are perilous to health and life. I can see no way that there can be minimal impact from the proposed training activities and I remain in protest until it can be proved otherwise. Thank you.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.

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		The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Huenke	NO to range expansion. NO to new weapons testing. NO to old weapons testing. Money for jobs and education. Not for wars and occupation. Protect our oceans and the beings that occupy them.	This comment has been duly noted.
Huffman	How did we get turned around to the point that the greatest threat to the Oregon coast is the organization theoretically created to protect it? Institutional inertia maintains over-sized institutions making complex plans for unrealistic scenarios. No foreign power is going to attack the Oregon coast, but its fragile ecology cannot stand the onslaught of war games. Please temper your militaristic enthusiasm and focus on helping people and the planet rather than killing.	This comment has been duly noted.
Hughes	The current ongoing Navy weapons program in Oregon should be suspended permanently and that the new proposed Navy Warfare Testing Program expansion stopped.	This comment has been duly noted.
Hugret	Dear Ms.Kler: We are writing in protest to the Navy's plan to test weapons in the areas you have designated around Whidbey Island. We have lived here for 19 years and have sadly watched the orca and killer whale population diminish. It would be a tragedy for all kinds of marine life that are declining rapidly. Thank you for your consideration in this very serious matter, Alixe and Jeff Hugret, Whidbey Island	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges. This includes the areas around Whidbey Island. The Navy has worked closely with independent agencies for oversight. There is no Navy training with sonar conducted in the Puget Sound.  The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Hulen	I understand the need to test and develop better technology for our safety. I am from a military family and have a nephew in the Navy. But, I also believe that the testing can and should be done away from populated areas and do its best to protect our fragile environment. I see no need to test new or existing technology close to Puget Sound or our coast. Technology has advanced enough that computer simulation can be used to measure the effect of such tests on the human and animal population without exposing us to its effects.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed. Also, all sonar training will be conducted out in the offshore OPAREAs and not within the Puget Sound.  As described in Section 2.3.2.2 of the Draft EIS/OEIS, the Navy includes extensive use of simulation in its training. However, there are limitations to simulated training that necessitate live training, such as that in the NWTRC.
Hull	Please give the public time to have input. Do not make the northwest Pacific into a "war pollluted zone" without following due process and listening to the citizens you are suppose to be protecting.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Humes	Gentlemen: Seems the process has been really hurried along without the proper vetting from the public and the State of Oregon in general. Oregon is in the process of testing marine reserve and marine protected areas off the	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not

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	coast of Oregon and it seems to me that that your testing, to this scale, would be very damaging to this program.	limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	Until proper feedback and input can be give from local and scientific research, I would hope that your program would hold off. Surely some agreement can be worked out where State interest and the Navy interests can work hand in hand.  No need to shove this down our throats. Just common courtesty and proper communication might be the ticket.  Best Regards,,, Bill Humes	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hunter	Please do not expand military training in the Puget Sound. I am concerned about the effect of sonar on marine mammals and the impact of depleted	Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
	uranium on the marine environment. I do not believe the proposed military training exercises are worth the risk. Thank you.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Huntington	I live on Lopez Island and think it is ridiculous that air traffic be increased over the islands. The amount of noise and disturbance the Naval Air Station currently causes is unacceptable. With hundreds and thousands of square miles of open ocean to practice maneuvers over I can see no reason to continue flying directly over the land masses of the San Juan Islands. The current and proposed uses of airspace pose unacceptable risks to the public and their property. As a U.S. citizen and as a neighbor I urge you to rethink your plan and only proceed when you can prove beyond a shadow of a doubt that your intended goals will not conflict with the health, well-being and safety of the people you are sworn to protect.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Hurd-01	Access to the 1068 page EIS documents was unavailable from the Navy's website: www.nwtrangecomplexeis.com/EIS.aspx from Jan 15 -21 (15% of Public Review Period). Further, it appears the Navy's primary mechanism to receive public comment: was non-functional (due to an "abort" issue online) from the Dec. 29, 2008 until Jan 21 (51% of Public Review Period ending Feb 11). I demand an extension.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Hurd-02	While recognizing the need for readiness through training, the No Action Alternative is all that we can support due to lack of information available to assess the impact on numerous endangered and declining marine species,	This comment has been duly noted.

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	especially with proposed testing of new systems.	
Hurd-03	Prior to supporting proposed changes in training activities the Navy needs to fund independent research on the seasonal presence of marine mammals, fish and birds found with their training ranges rather than rely on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Hurd-04	The Navy needs to provide the public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Hurd-05	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships and commercial vessels.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Hurd-06	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety to human consumption of fish taken from fisheries must be researched and assured. Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.  To the contention that "depleted" uranium pose no significant health threat to fish, mammals including humans I would like to enter into this response the entirety of the text "RADIATION AND HUMAN HEALTH" (in quotes and capitalized here with your online form due to lack of underline capacity) authored by John Goff, M.D., Ph.D. Please include it in this eis consideration process.  With it's 4+ Billion year half life, any spreading of D.U. is extremely dangerous. Ingested or inhaled, it's alpha particle decay can create cancers quite readily.  In the context that the Navy intends to spread "depleted" uranium, a toxic radioative heavy metal across the Pacific coast sea floor including a Natioanal Marine Sanctuary,  I ask that the book "Radiaion and Human Health" be included in the comments. The book is authored by John Goffman, M.D., Ph.D. John William Gofman (September 21, 1918 - August 15, 2007) was Professor Emeritus of Molecular and Cell Biology at University of California at Berkeley. Some of his early work was on the Manhattan Project, and he shares patents on the fissionability of uranium-233 as well as on early processes for separating plutonium from fission products. Dr. Gofman established the Biomedical Research Division for the Lawrence Livermore National Laboratory in 1963. (I erroneously entered a comment earlier attributing the book to John Goff.)  Further, please enter the following reference text into the comments: METAL	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that "most, if not all, of

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	OF DISHONOR: HOW DEPLETED URANIUM PENETRATES STEEL, RADIATES PEOPLE AND CONTAMINATES THE ENVIRONMENT Publisher: International Action Center; Uab edition (1997); ISBN: 0965691608  In May, 1997, the International Action Center published a book of essays and lectures on depleted uranium: the contamination of the planet by the United States military. In addition to exposing the deadly duplicity of the Department of Defense, the book documents the genocide of Native Americans and Iraqis by military radiation, the connection between depleted uranium and Gulf War Syndrome, the underestimated dangers from low-level radiation, the legal ramifications of DU Production and Use, and the growing movement against DU.	little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Hurd-07	End the Policy of Dumping Depleted Uranium  Low doses (exposures under .1 Sievert or 40 times the average yearly background exposure) are less predictable than high levels, the effects are not immediately visible, and involve the cancerous transformation of cells. Seven reports since 1956 have been published by the National Research Council's Committee on Biological Effects of Ionizing Radiation (BEIR). The reports address the potential health effects from exposure to low doses of radiation. Since 1990, the committee has supported the linear no-threshold model hypothesis. This hypothesis states that all exposure to radiation, no matter how small the dose, presents some risk to human health. The most recent committee report (BEIR VII) calculated the expected cancer risk from a singular exposure of 0.1 Sievert. The committee found that in a lifetime approximately 42 out of 100 people will be diagnosed with cancer and one cancer out of these 100 people could result from a single exposure to 0.1 Sievert of low-level radiation above background. There is still a lack of scientific certainty over what level of radiation exposure leads to cancer, mostly due to the difficulty in proving a casual link between a specific radiation exposure and adverse health effects, however the likely risk is sufficient reason to prevent the dumping of depleted uranium in to the Pacific Ocean, since it could expose workers and hundreds of U.S. communities to low-levels of radiation.  In response to the Navy's conclusion that their use in NWETRC trainings of the euphemistically designated "depleted" uranium, aka DU, does not pose a significant health risk to the populations along the Pacific coast of the US, I quote from the book Radiation and Human Health by John Gofman, M.D., Ph.D. p. 26. First let me state that uranium, albeit "depleted" emits alpha particles on a gradually decreasing basis until it does so at half the rate it did initially. This takes no less than 4.4 Billion years. Then it continues to do so until decreased by half a	Dumping—defined as the intentional disposition of wastes generated ashore or materials onloaded in port for the express purpose of disposal at sea—is not practiced by Navy ships.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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	piece of paper is placed between the source and the counter, and the whirring ceases, showing that no alpha particles are getting through the paper. What the public is supposed to construe from this demonstration the "weakness" of alpha particles for causing biolological damage. "after all, they can't even make it throught a sheet of paper." The reader by now knows how ludicrous this demonstration is. The reason the alpha particles do not get through the paper is that they are so effective in damaging chemical bonds in the paper that they transfer all their energy in just the thickness of the sheet of paper. The appropriate conclusion is that the alpha particles should be expected to be very damaging in gin through tissue. If an alpha-emitter is lodged, for example, in the lining epithelium of the bronchi (where lung cancer originates), three or four sensitive cells there will get an enourmous blast of energy as one alpha particle expends its energy in passing through them." -Radiation and Human Health by John Gofman, M.D., Ph.D. p. 26. The present and ongoing use of DU by the Navy in traing exercise and especially off the Pacific coast in proximing, indeed in the MIDST of fisheries is irrational, illogical, dangerous, deleterious to the health and well being of all inhabitants is so in the extreme due to the longevity of the radioactivite toxicity of the material. It must be stopped immediatly and not increased whatsoever. This EIS serves as a "sunset review" on the present use of DU. It must be stopped immediately. It must not be allowed to increase. Thank you.	
Hutchens	Evidence of loss of marine life due to Naval activates is common public knowledge. No further examples form carcass on the beach and other forms of evidence seen by the public are necessary to know that this plan cause's grater harm to the public then the trade off for protection to national security is worth. Table 3.9-13 is one example of the Navy's own study that shouts how we should slam the brakes on such activity. My voice on the mater is representative of countless millions of people's viewpoint on the mater. We demand the Nay's plan be halted immediately and permanently.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Hyde-01	I am opposed to the expansion of testing in the North West. In fact, I would like the Navy to discontinue testing entirely. Those who are promoting this activity should look into their hearts as individual human beings and ask their hearts if it is a good idea to explode bombs, blow up sea life, damage and kill whales and deposit radioactive materials in the ocean. It is inconceivable that the answer would be "yes". They should then take the answer that is in their hearts and let it guide their actions.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Hyde-02	When the state of Puget Sound, the state of the Southern Resident Community orcas, the decreasing amount of sea birds, the toxic levels of the water are all in a fragile/horrible state, that the Navy would even consider adding 'insult to injury' so to speak to the waters of the Salish Sea, Strait of Juan de Fuca, Puget Sound and the outer coast is appalling. Someone spotting for marine mammals at a distance of 200 yards shows to me that you haven't a clue what	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction

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	is going on out there in the water. What if the orcas (i.e. one of the pods of the Southern Resident Community) are in a resting state and they give out no sounds or are on a deeper/longer dive, what if your 'spotters' just miss the whales or steller sea lions, or elephant seals, or Dall's porpoise or harbor porpoise, just to name a fewonce you have killed them, once you have harmed them with your 'war training' it's too late'oh, so sorry we made a mistake" doesn't bring them back to life, it only continues adding to the destruction of marine life, the ecosystem, the environment and ultimately us. There are places you can practice without being in these inland waters, your practice sessions and war games just add to the problems that people are trying to clean upplease go somewhere else and please have more spotters and a much, much greater distance to remain away from all marine mammals. Our planet is in a fragile state, and the continued destruction of resources must stop, and that includes avoidable things such as the Navy is proposing. Thank you for allowing me to comment.	under supervision of an experienced lookout followed by completion of Personnel Qualification Standards Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise. Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Ibold	military aircraft should use the same sound limits as commercial aircraft. until then they should avoid flying over populated areas whenever possible	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Illg	I am adamantly opposed to increased flyovers in the region of the San Juan Islands. Please direct your activities to areas where there are not whales feeding and people trying to live quietly. Thank you,	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Imbach	The Navy can surely find other areas away from shore and the concentrations of marine mammals and fisheries to practice their craft.	This comment has been duly noted.
Incollingo	It is my hope and belief that the Navy should maintain a VERY strong presence on all our coasts and continually be training for the very real threat of attack from any number of sources. Forget about any environMENTAL wackos, we need and trust the US Navy to keep our shores safe!	Thank you for your comment.
Iversen, E.	Please DO NOT allow the proposed US Navy plan to expand its training area to include the entire Puget Sound waters to northern California coastline. These maneuvers would exclude the present various uses of these waters so important to our economic well being and would be redundant in the preservation of our national security. We strenuously OBJECT.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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Iversen, R.	I am in full support of the increased training planned and any future training requirements for the US Navy in the NW Training Range Complex or any other location deemed necessary to meet US Navy readiness requirements.	Thank you for your comment.
J.	We, who have served in the armed forces, are aware that the military, especially, personell in military intelligence, that operations and information sharing is highly compartmentalized. There is a verifyable history of training exercises going live, ie. 9/11 and 7/7 bombings. To pull this off, there needs to be high level commanders who give the orders to carry out, and, supress the truth as they do so. Then, there needs to be lower level grunts, boots on the ground, who simply follow orders and are told not to discuss what they see and hear. Please, all who are involved with these "exercises", if they go live, please make as many mental notes and write whatever you can recall, as quickly as you can, and report it to outside sources. You could start by contacting ghosttroop@yahoogroups.ca Honor your oath to defend the constitution. Protect U.S. citizens from more death and suffering at the hands of the shadow government's false-flag operations.	This comment has been duly noted.
Jackman	I am opposed to any sort of "weather testing & chemical weather control." This endangers people now and in the future and instead of experimenting with our weather for purposes of war maybe our trillions of tax dollars could be spent AVOIDING WAR of any type and promoting clean energy sources to alleviate our dependence on foreign oil.	Weather testing is not part of the proposed action for this EIS/OEIS.
Jacobs	The NW coastline and adjacent waters is an amenity for all US citizens. The area is not in danger of naval attack and to preclude its use by members of the public on the basis of national security makes no sense. Neither exclusive use by the Navy nor activities that may harm flora and fauna should be permitted.	The Navy shares the ocean and the skies above it in the Offshore Area of the Northwest Training Range Complex. There are no "exclusive use" areas, nor does the Navy restrict the use of any area.
Jacobson	I object to the expansion of weapons testing in the state of Washington on two grounds: 1) adverse health effects that are not measured or documented, that are more toxic to children and may take years to develop, and 2) we have reached the limit of being able to control the world's people and resources with weapons. We need to find peaceful means of co-existence or we will cease to exist as a species.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Jamieson	"There are currently 63 species listed as either threatened, endangered or "of concern" in the Puget Sound. Of the 63 species listed by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants are the most commonly cited causes for species declines. Additional military operations including plans to expand operations, adding dummy minefields, scheduling hundreds more training flights and warfare simulations over land and sea, and increasing the use of sonar will add potential threats to endangered and threatened whales and other marine mammals throughout the region. This month, President Obama overturned the Bush Administration's endangered species rule upon which your requests for increased Naval actions rests. Allow the scientific process to reign and stop	This comment has been duly noted.

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	the upswing of operations. We cannot remain helpless to the impact on our enviroment. I am against increasing activities in this region. "	
Jarmin-01	This is a DISGRACE and must be stopped. Our beautiful earth and it's people are being destroyed in the name of "national security". NONSENSE. The US invents/causes problems all over the world and then invents, produces, uses and sells expensive chemicals & armaments to "keep the country secure". This is a hoax and a crime against nature and humanity. The airborne and waterborne residue from the Navy's toxic chemicals will be with us in our air and seas, in our seafood, crops and drinking water in perpetuity; the wind will carry them inland to the orchards, wheat and crop lands of eastern WA, OR, ID, MT and beyond. In addition to this, our weather is being manipulated by the military experiments.	Weather testing is not part of the proposed action for this EIS/OEIS.
Jarmin-02	Unless the taxpayers put a stop to this, the Navy will continue to use depleted uranium, white phosphorus and other toxic chemicals in their "training" and in the trumped up wars the US starts and promotes. We, the taxpayers, are forced to pay for the chemicals that kill our marine life, poison the seas, spread poisons via the wind & will continue to poison our environment for the rest of our lives and those of many, many, many future generations. THIS NEEDS TO STOP AND STOP NOW!	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Jeffrey	I am not in favor of Whidbey Island Air Base increasing flight training in our neighborhood. Please do not do this. We are in your flight pattern and this will adversely affect the quality of our life. This is unreasonable. Please do not increase your flight training in our region.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Jensen	fly over my house anytime you want to. thank you for help keeping us safe!	Thank you for your comment.
Jenusaitis	I am opposed to the expansion of the training range complex because of many reasons. However, my biggest concern is the huge amount of our country's resources that are already devoted to war. I believe that if we focused more of our efforts to creating understnding and peace, we will no longer need such a bloated miitary budget. Thank you for your attention.	This comment has been duly noted.
Jewett-01	I am extremely concerned about impacts to marine life. These concerns are specifically related to the effect of Navy sonar on marine life, such as marine mammals, fish, sea turtles, and sea invertebrates. Please consider alternative technologies to mid-frequency sonar.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.

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Jewett-02	I am also concerned about impacts to marine life. You should adhere to the specific policies identified in the Marine Mammal Protection Act.	The Navy is in full compliance with the Marine Mammal Protection Act and has engaged the National Marine Fisheries Service as part of this process.
Jewett-03	You need to consider the protection of birds, including shorebirds, seabirds, and migratory birds. Potential stressors to birds include bird strikes and noise disturbance. There is also potential damage to intertidal, inland, or upland resources.	The potential impacts to birds is analyzed in Section 3.10 – Birds, in the Draft EIS/OEIS. The analysis included bird strikes and noise disturbance.
Jilot	In today's Oregonian I read the article informing me about the Navy's plan to increase operations along the NW coast. I have also looked on the NW training range website and would like to voice my concern on a couple of issues.  The most concerning to me is the use of midfrequency sonar that would be used along our shores and it's impact on the wildlife and fisheries. We have whales that migrate these waters often. I read that the "Navy rejected the idea of seasonal shutdowns or avoiding key habitat areas." This seems irresponsible to me. We need to share and respect this home that we inhabit with so many other creatures.  I appreciate it when people who disagree with a proposal have an alternative solution. But since I don't understand all the workings of the Navy I can offer none.  I simply write this to voice my concern in hopes this letter will be read and become a number on the side I wish to uphold.  Sincerely, Patricia Jilot	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Johnson, G01	I am strongly opposed to the proposed naval testing in the waters off of Northern California and north to Washington state. These fisheries are already in serious danger. There is life in the ocean and further destruction of habitat is to be avoided.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Johnson, G02	I have also heard that some weapons may contain Depleted Uranium. We have enough serious life supporting threats with Climate Change. Please do not add to it. Life is a connected web and what we pollute and destroy does	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to

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	come back to haunt us.	public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Johnson, James	The United Sates is supposed to lead the way. Harmimg whales to do test's, does not seem like we are leading the way.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Johnson, Jerry	I am against any testing because the fish count is very low and any disturbance may wipe out existing fish populations.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Johnson, K01	I have seen all too many times and as a new recruit checking into a division while underway, I was ordered by a superior Petty Officer and in some cases even a Chief to "just get rid" of bags of trash, too many times to attach a number.  The environmental impact of such dumping, not having any proof to back it up, must be severe. My thought is simply, drain the ocean and let's see what a mess we've created.  I'm asking for a review of the policies of overboard dumping, a stiffening of penalities for those caught, Capt. Kendall Card threatned restriction and a reduction in rate for anyone found to be throwing items overboard and upheld his threat. He is a good and honest man.  It's time to keep the garbage on the ships.  Kevin Johnson	The current waste discharge restrictions for Navy vessels is described in Section 3.4 of the EIS/OEIS.
Johnson, K02	Being ex-Navy, ABH2, let me first say that training is paramount to readiness. Working the flight deck as a fully qualified aircraft director onboard CVN72, I know that work up periods make not only the pilots ready for action but the crew as well.  Many mistakes that happen during training can be easily fixed and corrected before actual combat with the enemy ensues should the need arise.  I was part of the flight deck crew during the Shock and Awe campaign and had not the USS Abraham Lincoln staff and crew spent the long hours training that we did, the operation would not have been a success.  My concern is not with noise or the harming of animals, I believe that some aspects of an ecosystem must suffer in order for the greater good to be served. I am concerned however about what sailors onboard these warships illegally throw overboard. Used appliances, plastic and garbage are just a few of the things routienly deep sixed because those in charge of disposal are too lazy to take them to the proper station for legal disposal.	This comment has been duly noted.
Johnson, M	I am very sure that using weapons that have unknown effects is the wrong choice. We have abundant life here in the NW and the whales are a symbol	This comment has been duly noted.

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	and beloved sight here. The east coast is covered with buildings and pollution, let us not be in the same boat. It is beautiful here and the thought of bombs, training and other military activity is frightening. May our waters continue to be quiet and serenel oppose this strongly and so do many others. hopefully we are being listened to and not ignored. May this be a true democracy. May our children live to see a whale that is not in a aquarium.	
Johnson, S.	As an owner of a business that relies on tourism, I am concerned what impact expanding your training area down the coast of Oregon will have on our businesses and on our environment. I am concerned about the impact on marine mammals, as well. I am sorry that you have not had a meeting to explain and answer questions in our area of the southern Oregon coast.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.  The Final EIS/OEIS has been revised to clarify that the majority of these offshore activities occur off the coast of Washington, and decreasing in occurrence in the southern part of the Offshore Area.
		The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.
		Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Johnston, B.J.	How dare you test in our coastal areas! The oceans are vast and I believe you can locate another area, away from the migration routes of whales and other marine mammals, environmentally sensitive areas and away from dense populations of people who go boating on those waters! According to your report, wildlife will be harmed, but it's deemed "expendable". We are already seeing reduced numbers of salmon and crabs in these potential test areas. We've closed or limited commercial seasons for the past several years. Ask yourself, "Would I rent a boat and take my family out in those test waters?" I bet not! Please listen to the people this time and find another location!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The Draft EIS/OEIS does not indicate in any way that any wildlife is "expendable." The full analysis of potential impacts to the marine environment is found in Chapter 3 of the EIS/OEIS. The analysis consistently found either no impacts or very minor impacts.
Johnston, E.	The impact of exploding mines under water on the sensitive geological condition of the Oregon Coast fault system has not been fully investigated. The potential threat of triggering earthquakes and tsunami's is too great to warrant this kind of weapons testing.	No underwater detonations would take place off the Oregon coast as part of this proposed action.  The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." (http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&nextRow=next)
Jones, G01	Hello, my name is Gwen and I live in San Diego, Ca. My zip code is 92107 and I would like to leave a comment. This pertains to The United States Navy and the U.S. Department of Defense, who have decided that their Northwest Training Range Complex, in the State of Washington, should be expanded, and they have devised a draft Environmental Impact Statement, dated December 30th, 2008, for public review and comment. The expansion of their area of operation will include all of the State of Washington, all of the State of	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

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	Oregon, part of the state of Idaho, and Northern California. This area will also include large areas of the Pacific Ocean from California to Washington.	
Jones, G02	The U.S. Commander of the Pacific Fleet has given American citizens and residents of these states only a very short time to comment on their draft EIS, again, published on December 30 2008, with a final public comment deadline extended to March 11, 2009. This EIS document is roughly 1000 pages long with attachments.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Jones, G03	In addition to a short public comment time, the Navy also limited public hearings to five, with only 1 held in Oregon, 1 in California and no hearings in Idaho. The Navy has failed to place information about this EIS in major newspapers or to inform our elected representatives about this program! It should be noted that most elected representatives in California and Oregon were not aware of this EIS or the consequences of this action by the Navy. Thus, the citizens of California, myself included, are asking for a realistic extension of time to read, study, and comment on this decision by the Navy and the Department of Defense PAST the March 11th, 2009, deadline. If we do not get this extension of time, The Navy will potentially contaminate our air, water, and soils with the chemicals used in these programs. Thank you very much. gwen jones	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  Also, notifications of the meetings were delivered to a number of organizations, agencies, and State and Federal elected officials as described in Appendix F.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
Jones, L.	this proposal is atrocious. it needs to be vetted by public opinion and more then one measly meeting, in one small town, with one published plan needs to happen.  don't bomb the life out of our own coastruining one of the last natural coastal areas in our country.	This comment has been duly noted.
Jones, M.	The EIS/OEIS NOI was not published in the federal register on July 27, 2007 as stated in the Executive Summary. The EIS/OEIS must be withdrawn, corrected, renoticed and recirculated.	The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The date in the Draft EIS/OEIS was in error and has been corrected in the Final EIS/OEIS. The Navy has complied with all NEPA notification requirements.
Jones, N01	I am very opposed to Navy expanding it's testing area and using chemical weapons of war off the coast of Ca, OR, and Wa. or any where else for that matter. I do not want the Navy killing marine mammels they are "NOT EXPENDABLE" like the navy believes. If the Navy belives that marine mammels are expendable to me signifies the end of civilization. I am opposed to the Navy using sonar and chemical weapons of war in the puget sound.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
		The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
		The Draft EIS/OEIS does not indicate in any way that any marine mammals are "expendable."
		The full analysis of potential impacts to the marine environment is found in Chapter 3 of the EIS/OEIS. The analysis consistently found either no impacts or very minor impacts using sonar or chemical weapons.

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Jones, N02	This request is insane considering NoAA is shooting sealions under the blood soaked cloak of saving salmon. So than why I ask would they allow the Navy to blow up the remaining salmon runs in our oceans with their sonar and chemical weapons of war? This state makes its money from tourism and fishing, so letting the navy expand to take over our coast and kill everthing in itI say is a very, very, bad idea for Oregon and all humanity	Socioeconomic impacts in regard to the fishing industry, tourism and recreation have been analyzed in Section 3.14 of the Draft EIS/OEIS. Impacts to fish and fisheries have been analyzed within Section 3.7. The analysis consistently found either no impacts or very minor impacts.
Jones, N03	If you fill our oceans and air with depleted uranium and other chemical weapons of war it is a crime against humanityand should be seen as an act of war against the people of the united states. If this attrocity is allowed to take place the navy will secure its fate as destroyers of the oceans and murders of the U.S> people which they are sworn to defendThese horrific acts in a humane civilized world would never ever be considered	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Jones, S.	The noise from military aircraft training in Okanagan county and specifically the Methow Valley is really bad. Please REDUCE flights over here! There is much too much noise from training flights, it is REALLY bad!!!!! The planes fly too low and are too loudit is out of place and unwanted. Thanks.	The analysis of airborne noise impacts is found in Section 3.5 of the Draft EIS/OEIS. Flight activity associated with the Okanogan MOA, which would be part of this proposed action, is typically at higher altitudes. There are also several military training routes (MTRs) running through Okanogan County. These are not Navy routes, and can be flown by any military aircraft at low altitudes. These MTRs are outside the scope of this EIS/OEIS.
Jones, U.	I strongly object to weapons testing off the California Coast due to the constant presence and migration of marine mammals such as different species of whales and elephant seals. These animals are negatively impacted by noise, not to mention debris from weapons and their propellants.	The full analysis of potential impacts to the marine environment is found in Chapter 3 of the EIS/OEIS. The analysis consistently found either no impacts or very minor impacts.
Jones, V.	Please extend your public comment period another 30 days. Our organization is studying the EIS and the time provided for public comment is much too short.  Sincerely, Valentine S. Jones	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Jonsson	Please do not increase the flights coming in and out from Oak Harbor. It is nearly deafening as it is on any day the sun comes out I have to wear earplugs when I am working outside. I realize that you are trying to use these planes ultimately for our protection, however, it has a damaging affect on the quality of life here on the other side of the island. It has become more than a nusance and more of a issue with temporary hearing loss and loss of silence which is an important part of my work.  Thank you for your consideration.  Sincerely, Theodora Jonsson	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Joyce	I AM ADAMANENTLY OPPOSED TO THE NAVY DOING ANY MILITARY AND SONAR TESTING OFF THE COAST OF WASHINGTON, OREGON OR CALIFORNIA. IT HAS EXTREMELY SERIOUS ILL AFFECTS ON SEA MAMMALS.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action calls for continued training of Navy personnel with

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	PLEASE SEISE AND DESIST FROM CONTINUING THIS PRACTICE, MUCH LESS EXPANDING IT.	established weapons systems, similar to what has been conducted in this same area since World War II.
	THANK YOU FOR ALLOWING TO MAKE THIS COMMENT.	
	CJ JOYCE	
Judson-Rosier	This kind of testing and training is unconscionable in any seas, anywhere. We know what this does to the sea creatures who use sonar. We know that ocean floors should not be disrupted. We have one sacred earth with its sacred oceans. Haven't we messed up the world enough? We need to get away from this war mentality and work on renewal, regeneration, the health of the planet. That needs to be the focus.	This comment has been duly noted.
Jupiter	I strongly disagree with the U.S. Navy's draft EIS plan to test all sorts of weapons off the Mendocino coast. This area is home to all sorts of wildlife, including being in the path of important whale migration. This is a precious resource and must be maintained as such.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
		The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Jurczynski	I am concerned about the deaths of marine mammals due to sonar testing.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Kahn-01	I am writing as a concerned citizen against plans to do warfare testing in the northwest training range complex. My understanding is that this will involve the use of toxic chemicals and heavy metals, as well as the burden of weaponry in the environment. This is undoubtedly bad for the local ecosystems in which such "mock" warfare would take place war being one of the greatest ecological calamities we have but as such chemicals and metals circulate throughout the larger biogeochemical cycle of the continent, such activities as planned can affect others beyond the region proper.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  Please see Page 3.3-10; Hazardous Materials and Wastes for the results of recent studies conducted by the Northwest Fisheries Science Center (NOAA) concerning the current level of toxic chemicals and heavy metals on the ocean floor.
Kahn-02	Lastly, I have been made to understant that the draft EIS does not address the potential environmental impacts on multiple resources like air quality, water resource, airborne acoustic environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety. For all these reasons I stand opposed to allowing such training as drafted. Thank you.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.

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Kaiman	The Navy should continue doing whatever it needs to do in order to train aviators to protect our country. We are still at war, and still at risk from terror attacks. The inconvenience to people who reside in the San Juans is minor, and the benefit to the Navy is obvious. God bless the brave sailors of the US Navy who protect and defend us. GO NAVY!!	Thank you for your comment.
Kaplan-01	Why do you think that testing new underwater weapons, exploding underwater charges and lobbing more depleted uranium in the Olympic National Marine Sanctuary (and other West Coast locations) means good stewardship of the environment. In this day and age of renewed diplomatic energies, why are acontinuing to test new weapons. The weapons you have already are good enough for me. Depleted uranium in our environment? To kill people, fish, mammals? For what purpose? Are you aware how your underwater efforts have hurt the marine mammals already? I am outraged that you are considering doing all this destruction and environmental degradation with our tax money! Stop these tests immediately!	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Kaplan-02	Re: Expansion of Navy's training activities in areas off the whole Oregon coast The proposed increase in artillery shelling practice, submarine exercises including munitions and its debris, missile firing, increased hours of sonar will aggravate the problems already identified with sea life - some of it close to being endangered.	This comment has been duly noted.
Kaplan-03	It would also have a negative effect on the fishing industry, which provides a healthful food for our nation. Once you have analyzed the negative impacts of your proposal, I urge you to cancel it. Thank you for your consideration of this important matter.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation have been analyzed in Section 3.14 of the Draft EIS/OEIS. Impacts to fish and fisheries have been analyzed within Section 3.7. The analysis consistently found either no impacts or very minor impacts.
Karcich	You are killing whalesBlue Whales particularly and you must STOP! Killing seems to be the business you are in and it is unfortunate. You have no regard for the species. Stpo the destruction caused by these actions.	This comment has been duly noted.
Karras-01	To whom it may concern: My husband, Dave Anolik and I oppose the Navy's proposed expansion of military operations off the Northwest Coast. I oppose any additional minefield training courses, training flights, military exercises and increased use of sonar in this area. As a matter of fact, we would support the reduction of all these activities until it is proven independently that these activities do no harm to the marine life and water quality of the coast.	This comment has been duly noted.
Karras-02	The Navy should extend the time allowed for public comment of its 1000 page environmental review.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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Karras-03	It has been proven that sonar has increased mass stranding events and to refuse the idea of seasonal shutdowns or avoidance key habitat areas shows a deep contempt for our oceans and the people who care about the environment.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Karras-04	Although your representatives claim these increases will do will harm to our oceans, the Navy's environmental tract record is poor. Clearly with an issue so important the lack of publicity and opportunity for public comment demonstrates the Navy's lack of interest in the public's involvement in this issue.  Sincerely yours, Gabrielle Karras and David Anolik 4201 SE Bybee Blvd	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Kay-01	I'm appalled and disappointed that my country's military would seek to do so much damage to the ocean environment of the western US. The threat to marine mammals alone should bring an immediate halt to this gargantuan initiative.	This comment has been duly noted.
Kay-02	Clearly our wars of the future will be fought on land with naval forces providing only backup. It is senseless to perform these exercises here on our coast, when the enemy is likely to be China or Russia. All I can figure out is that the navy wants to do exercises where it is convenient rather than where it will be useful.  I request an immediate withdrawal of this dangerous proposal.	The global proliferation of extremely quiet submarines poses a critical threat to the maritime interests of our military alliances and allies. The military use of sonar, and the ability to test and train with it, is critical to U.S. operational readiness and our national defense. Indeed, the national security interests of many nations require that naval forces be able to train with, test, and employ active sonar.
		Military training now is critical to ensure preparedness should our forces be called into action. We cannot in good conscience send American men and women into potential trouble spots without adequate training to defend themselves.
Kearns	Mid-frequency sonar can cause whales to make a dramatic change in behavior. On hearing sonar, whales may dive or rise deeply and rapidly. This can cause a form of decompression sickness, also known as 'the bends', resulting in sometimes fatal damage to the lungs, brain and ears. The International Whaling Commission (IWC) recently released a report that backs up previous claims of the harm that sonar can do. The report adamantly states that the noise produced by the military is damaging to cetaceans (whales, dolphins and porpoises) and in particular, rare beaked and right whales. PleaseSTOP THE NOISE!	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Keegan-01	"I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal

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		populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Keegan-02	This is in a Washington marine sanctuary, no less, and I emphasize the word sanctuary .	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Keegan-03	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, bad enough in itself, but some of it people eat, even worse.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Keegan-04	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Keegan-05	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.
		To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Keegan-06	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Keegan-07	Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.

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Keegan-08	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Keegan-09	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Keegan-10	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Keegan-11	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that "most, if not all, of

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		little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Keegan-12	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Keel	Increasing the flight training in my neighborhood will greatly adversely effect my quality of life. I am strongly against your plans to do this.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Keifer	I think who ever thought this up is absolutly not from this world! I am against this. This is wrong. As a citizen of the world, it is my right to say NO! It is your duty to abide by the peoples desires. For far too long has this been going on, where those that have the means and power think they can just do what ever they want to to this earth and her inhabitants! In the end the ones that do all this harm will pay dearly. But my voice will be heard along with many other caring people of the world. Is it not the duty of our military to protect and serve first?? Stop the waring and hatred. If you want peace as I think most of the human species do, then youu must become that peace you seek. No to you training Range! NO NO NO	This comment has been duly noted.
Keith	IN regard to the proposed increased military activity and testing off the coast of Oregon and Washington, I support the "NO Action" alternative at this point. The ecosystems and especially the large marine mammals are already in a very fragile state. The negative side effects of these tests, namely chemical and debris pollutants as well as sonar and underwater explosives are unacceptable in these waters. Please put an end to these maneuvers. I believe that the best defense is not a good offense but instead, worldwide arms reduction and a ban on testing such munitions worldwide. Sincerely, Laurie Keith	This comment has been duly noted.
Kelley	Tri-Valley CAREs has only recently become aware of this proposal that, as we understand, could impact the coastal waters and areas of Northern California as well as Oregon and Washington. As an organization with its major membership living in the San Francisco Bay Area, we request a 30-day extension of the scoping period. Please send us email to marylia@trivalleycares.org - or via postal mail - to let us know if there is an	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	opportunity for us to comment more fully on scoping for this project.	
Kenny+Glover-01	We want to comment on the Draft Environmental Impact Statement (EIS) for and to express our strong opposition to plans by the Navy to step up its training and to test new weapons systems in the existing Northwest Training Range Complex. This area includes much of the coast of Washington, Oregon and a bit of California. We especially oppose testing in the Olympic Coast National Marine Sanctuary and in parts of Puget Sound, including a portion of the west side of Whidbey Island, where we live.  Testing would include new weapons systems, new underwater explosive devices, and sonar designed to reach into shallow waters. Some of these systems, named Advanced Medium-Range Air-to-Air Missile (AMRAAM), Improved Extended Echo Ranging (IEER) Sonobuoy, Advanced Extended Echo Ranging (AEER), would involve the use of ships, jets, submarines and advanced sonar, and may include lobbing depleted uranium munitions into the water and allowing them to sink to the sea floor.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Kenny+Glover-02	We oppose these plans and demand an extension of the Public Review Period for a number of reasons:  1) They pose sonar hazards for marine life.	1) The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Kenny+Glover-03	2) They would introduce toxic, radioactive and highly dangerous depleted uranium and other heavy metals into the waters near our home, which pose significant threats to the health and life of marine life and of residents and vacationers.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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Kenny+Glover-04	3) The tests would disturb the quiet enjoyment by countless citizens of the areas in which they live.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Kenny+Glover-05	The EIS creates a very false picture of potential pollution by averaging pollutant concentrations over the entire expanse of the huge range complex, making levels in any areas of concentration seem benign.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Kenny+Glover-06	5) The EIS rationalizes the environmental harm in areas like the Marine Sanctuary because such areas are close to the existing locations of sailors and their use would cut down on travel time. This supposed, short-term cost savings is overwhelmingly outweighed by the severe, long-term, environmental consequences of the proposed testing.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Kenny+Glover-07	6) The public has not had sufficient time to comment on the proposed testing, because the draft EIS was off-line and therefore completely unavailable from	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the

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	Jan 15-21, 2009, which represents 15% of the Public Review Period.	original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Kenny+Glover-08	7) The Navy's primary mechanism to receive public comment was non-functional (due to an "abort" issue online) from December 29, 2008 until January 21, 2009, which represents 53% of Public Review Period ending February 11.	6 & 7) The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Kenny+Glover-09	8) While recognizing the need for readiness through training, a "No Action Alternative" is the only option that we can support, due to significant lack of information in the EIS, which makes it nearly impossible to accurately assess the impact of the proposed testing of new systems on numerous endangered and declining marine species.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Kenny+Glover-10	9) Prior to supporting proposed changes in training activities the Navy needs to fund independent research on the seasonal presence of marine mammals, fish and birds found within their training ranges, rather than relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Kenny+Glover-11	10) The Navy needs to provide access to the public to non-classified, ambient acoustic information in their training ranges, so that the public can confirm compliance with the Navy's operations.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Kenny+Glover-12	11) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas, including interactions between ships and commercial vessels.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Kenny+Glover-13	<ul> <li>12) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities and establish current levels of those materials in fisheries, fish, and other marine fauna.</li> <li>13) Safety relative to human consumption of fish taken from Range fisheries, and relative to human activities in those areas, must be researched and assured. Once these conditions have been met to assess the impacts of their current operations, proposals for testing new systems and expanded operations can be considered.</li> </ul>	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from
		inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not

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		created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Kenny+Glover-14	We strongly oppose the U. S. Navy's plan to expand its Puget Sound activities down the coastline to northern California. Newly authorized naval training activities would include extensive air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures (including underwater "training" minefields), intelligence, surveillance and reconnaissance operations and extensive unmanned aerial systems operations (i.e., drones), in an area of ocean from the coastline to beyond the 12-mile territorial limit. During its activities in these waters the Navy could prohibit entry into its training or exercise area. The excuse for pre-empting commercial fishing, tourism, surfing, sports fishing and boating over the entire Pacific Northwest coastline is "national security." We are deeply concerned about potential uses of sonar and about violent underwater explosions from munitions, since they pose proven and great hazards for marine life near the Washington, Oregon and California shores. The Washington training and testing area is supposed to be, by law, a marine sanctuary. Another very serious concern is the introduction of heavy metals and depleted uranium into water and seabed, which will spread dangerous radioactivity to marine, mammalian and human life life, as foods, nutrients and fish from the area are consumed. It is inaccurate and misleading for the Navy, in defense of its plans, to average	Please see responses to previous similar comments.

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	potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic. Moreover, using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible. We oppose the Navy's plans for the following, additional reasons: - There is a lack of information available to accurately assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with the proposed testing of new and unproven systems. Therefore, the Navy's claims that there will be no significant impact upon biological life, including humans, are unsubstantiated There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges, rather than relying on outdated surveys The Navy needs to provide the public with access to nonclassified ambient acoustic information in the training ranges, as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications The Navy needs to demonstrate a means to respond to a maritime incident in all areas, including interactions between ships, commercial vessels, and wildlife migrations The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human activities in those areas must be researched and assured In general, it is the height of contradiction to assert that warpractice activities are compatible with the purposes of a marine sanctuary. Please therefore stop the Navy's planned activities and block their usage along the West coast and life is too great to a	
Kersting	I am for the preservation of the earth. I am for peace. I teach peace. I support the life of humans	This comment has been duly noted.
Keve-01	This environmental statement appears to have been prepared for "Preferred Alternative 2" that is to expand naval operations in the Pacific Northwest. This is a precious marine and forest environment already exposed to naval sonar operations, the unresolved, unclean Hanford Nuclear site, apparent storage and preparation of nuclear materials such as Depleted Uranium at	This comment has been duly noted.

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	Indian Island, the Bangor Trident base with hundreds of nuclear missiles and nuclear-powered submarines, and the use of sonar which is most likely contributing to the decimation of the Orca population. Also, we now know that every flight, commercial or military, has a grave impact on our atmosphere. The money spent on military operations instead needs to be devoted to peace-making such as reparations for Iraq and Afghanistan, helping the growing homeless population, not preparing for the destructive activities of war.	
Keve-02	This short comment form hardly does justice to the high environmental impact of expanding the range of naval operations in the Pacific Northwest.	This comment has been duly noted. Also, comments could be submitted by mail at any time.
Kilduff-01	This EIS fails to adequately evaluate data presented in the document. For instance, there is no attempt to quantify the climatic effects of the CO2 emissions that are identified. And that brings up a general point that is a major hole in this document: it does not identify impacts to sustainability (e.g., waste, water, climate, or the competitive effects of global dimming from higher numbers of jet contrails).	GHG emissions were calculated for this Final EIS/OEIS. The values can be found in Chapter 4. However, because there is currently no set guidance from either the states or U.S. EPA on limitations, restrictions, or requirements, no conclusions can be drawn as to potential impacts.
Kilduff-02	Moreover, the biggest sustainability impacts may be seen at the community level. The proposed action discusses the increase in training flights, but the document implies that there will be insignificant increases in the base operations themselves. Will there be population increases at the bases with associated increased demands on (for example) water resources? Whidbey Island is an EPA designated sole source aquifer, but this is not mentioned in either the geology or water resources sections, and there is no discussion/evaluation of the potential impacts of the proposed action on the limited groundwater resources of Whidbey or other areas adjacent to the bases.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Kilduff-03	As an elaboration/clarification to my comment on sustainability, what will be the change in power and fuel consumption for the proposed action. For instance, will more jet fuel be required? How will this fuel be sourced and transported to the air fields? What about electrical power? Will increased electrical power needs be sourced from coal, nuclear, hydro, or other source? Most power in the northwest comes from hydro and nuclear, and while neither has a carbon footprint, both have significant (or potentially significant) environmental repercussions. Both hydro and nuclear power sources have a large water footprint (hydroelectric plants harm fish habitat and nuclear plants require large amounts of water for cooling). Will the Navy undertake a green power purchasing program to mitigate increased power consumption and its follow-on effects? Will green sources of energy (wind/solar) be installed at the bases to mitigate the increased power/fuel consumption and higher carbon footprint of the proposed action?	The Navy anticipates on additional power requirements outside the actual fuel consumed by ships and aircraft. Impacts to air quality from these activities is analyzed in Section 3.2 of the Draft EIS/OEIS.
King, E.	Enough is Enough.  There is enough weapons presently in this world to destroy the whole planet.	This comment has been duly noted.

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	How can the US Government talk about "cleaning up the environment and at the same time create, test and use that which is capable of destroying it?	
	How can Congress approve such a thing when they are unwilling to support a US Department of Peace chair on the Department of Defense Board?	
	This project will only make other nations want to develop weapons in order to protect themself from an attack from the United States. Then the whole world will be living on a ticking bomb ready to explode at any time. Iraq is a good example of why other nations would feel this way. Iraq is a good example as also is the attack on Gaza.	
	Is it Congress's goal to create Armagaden?	
King, G.	I am very opposed to any activity involving underwater explosions of any kind in coastal waters of the US and Puget Sound and adjacent waters. Marine mammals are especially at risk of being harmed as well as our already depleted fish populations. Training can be accomplished in the classroom or other areas that do not destroy portions of an already burdened ecosystem.	Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the Draft EIS/OEIS.
Kinsella	I read your statement plan and am opposed to it. There are too many unanswered questions. I feel it would be detrimental to the well being of humans and the water environment.  I think "No action alternative" is the appropriate choice.	This comment has been duly noted.
Kirk	I do NOT support increased training missions off the coast of WA. Our Navy is already too large and too expensive given the sorts of navies other countries have. Training exercises can also cause accidents with other ships resulting in oil spilling on the beaches and/or deaths and they disrupt marine life. Thanks. Geoff Kirk	This comment has been duly noted.
Kirkpatrick	no action off the North west coast please. Sonar emissions are known to cause whale beachings around the pacific rim No action People come to watch and enjoy the coast this activite from the Navey would stop this.	This comment has been duly noted.
Kirsch	I am opposed to this action. It has been proven over the last couple of years that populations of the mammals and fishes in our oceans have decreased by 50%. I was reading about that in Discover magazine just this morning. The increased use of sonar and bombing is unconscionable at any time, but particularly so in light of this fact. Please, don't put more undue stressors on our marine life. Global climate change is putting too much stress on this ecosystem already, and it's time to face facts. Our oceans are huge, but still finite, and we're about to see the consequences of thinking otherwise. Please do not follow through with these plans for the Northwest Training Range.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Kmetz	I feel that the impact of the Navy on all life forms is one that is decidely negative. To expand its operation would be against life. Please do not expand its training operations or any other things that might be planned. Thanks.	This comment has been duly noted.

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Knablin-01	This proposal is way off the track at the very beginning. It is obviously a holdover from an arrogant administration that tried to obfuscate and confuse the public over any issue that was slightly controversial.	This comment has been duly noted.
Knablin-02	The notification of the public was never put out. I read the local papers every day and nary was a word about this noticed until this final report. This violates the NEPA requirements and on that alone should be invalidated.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively.
		Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session and a public hearing. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.
		Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.
		Please see Appendix F of the Final EIS/OEIS for additional information pertaining to public involvement and notification.
Knablin-03	Aside from that, I object totally to the use of our off shore region, which we share with many other species, for war preparations. The billions that will be wasted on this project should be used for peace making. I am fed up with my taxes going to promote war and its profiteers. Time for a change. Here. Now.	This comment has been duly noted.
Knablin-04	At the very least, the comment time should be extended to allow a more thorough examination of the draft EIS by the public and local officials. Sincerely, Richard F. Knablin	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Knapp	I have been folowing this story and hope you proceed with your plansI am all in favor of making the central Oregon coast a safer place to liveand beleve all the negative comments are from misinformed peoplego naveJake Knapp	Thank you for your comment.

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Knych	Thank you for the opportunity to comment on the EIS regarding the NTRC. I live in the beautiful San Juan Islands and I can see whales from my home. Taking into account the military's past efforts to participate in their training exercises, it is my opinion that the few negative impacts on wildlife, environment, and my enjoyment of my surroundings are worth it. Our troops need to be properly trained so that I have the luxury of enjoying this beautiful area SAFELY. Thank you for your service! Jim Knych (Vietnam Veteran)	Thank you for your comment.
Koch, A.	To Whom It May Concern: I am unwaveringly opposed to ANY sonar or chemical testing in my state or anywhere in the Pacific Ocean. As a long time Washington resident, I am watching the extinction of many species in our area. As you well know, our salmon are declining at calamatous rates despite all efforts to save them. Your proposed tests can only wreck more havoc in this dangerously unstable climate. I will not ever stop opposing your plans. Sincerely, anne koch	The proposed action includes no chemical or sonar testing, but rather the training of Navy personnel with established systems.
Koch, C.	From my experiences living over 20 years on the coast in Alaska, Navy testing off the coast can have a negative effect on the environment, fisheries, and industry. I don't think that the amount of testing on the Oregon coast should be increased. Our coast is already in dire condition and is very sensitive to environmental stresses. I am very much against the use of our coast as a training range.	This comment has been duly noted.
Koehl	Please do not use the Oregon coast as a training ground! SONAR has shown to interupt sea mammals behavior and lives tremendously! This is not something my family and friends want for this state!	This comment has been duly noted.
Kohlmann	Although I support training in our military, I don't support training that most likely have unexpected consequences. We have been given this earth and all that is in it. It is not ours to destroy. Thank you for the opportunity to submit comments.	This comment has been duly noted.
Kolff	As a citizen of Port Townsend, Washington, I am very aware of the impact of any activities carried out by the Navy since I can see the facilities at Indian Island directly across the water to the east. I am concerned that the chemicals which may be used in the Northwest Training Range Complex may be toxic to the already fragile marine life (and humans) in Puget Sound. I would like to request a complete list of the toxicity and health effects of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters that may be used. Thank you, Helen Kolff	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Koski-01	To whom it may concern: I am writing to request that the Navy carryout a much more detailed and complete Environmental Impact Statement review that includes and evaluates the following items in all of the alternatives: - Monitor the location of the endangered population of Southern Resident Killer Whales(SRKW) whenever they are outside of the Strait of Juan de Fuca Report the location of the SRKW to the marine mammal research community with no more than a 24 hr delay between sighting and reporting.	The Navy has developed a Marine Species Monitoring Plan (MSMP) that provides recommendations for site-specific monitoring for MMPA and ESA listed species (primarily marine mammals) within the NWTRC, including during training exercises.  However, it is typically not possible, in the course of Navy training, to identify a killer whale as a member of the SRKW distinct population segment.

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Koski-02	-Reduce the power or shutdown Navy SONARs whenever cetaceans including SRKW are within acoustic range (defined as received levels of SONAR pings estimated to be greater than an appropriate threshold such as 120 dB re 1 microPa peak-to-peak at the location of the cetaceans). This should also apply in the ocean wherever cetaceans including SRKW happen to be.	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. The mitigation measures used by the Navy have been developed in cooperation with the National Marine Fisheries Service.
Koski-03	-Stop creating underwater explosions when cetaceans including SRKW could receive levels as defined above.	The potential impact to all marine mammals from underwater explosions was analyzed in the Draft EIS/OEIS in Section 3.9.
Koski-04	-If the location of SRKW in unknown, refrain from noise generation by loud SONARs and by explosions at night.	This restrictions on Navy sonar use has been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Koski-05	-DO NOT operate aircraft, fixed wing or helicopters, directly over cetaceans including SRKW whether they are in the ocean or in the inland waters of the Strait of Juan de Fuca or greater Puget Sound. Do not create loud airborne sounds that can propagate straight down and into the waters where there are cetaceans. Thank you for your time and consideration.	The potential impact to all marine mammals from aircraft overflight was analyzed in the Draft EIS/OEIS in Section 3.9.
Kratovil	In spite of my concern over impacts on the environment, your intentions and stewardship seem to be excellent.	Thank you for your comment.
	Congratulations! and thank you for your concern.	
Kratter	We are totally opposed to a proposed increase in numbers of training flights over the San Juan Islands and over San Juan Island in particular. We live on the west side of the island. The resident orca population decreased about 10% last year and we are concerned about an increased acoustic impact on these orcas which are now on the endangered list.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Krein	Strongly opposed to this measure! A rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake along with the human health effects and dead marine life. Many areas of California, Oregon, Washington, and Idaho would be contaminated from these experiments through airborne and water migration across these regions.	This comment has been duly noted.
Kyle	Dear Naval Operations Staff:  As you know, our Pacific Coast is the migratory pathway of the Grey Whales. This is olne of earth's treasured events. Could you please advocate for a seasonal hold on the use of explosives and sonar from December through Apil so that these great creatures can migrate in safety from Alaska to Mexico? So much will be lost if they are lost. They can't be replaced. Thank you for not just deleting this message but rather forwarding it to whoever can act on this plea. Sincerely, Linda Kyle	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is

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		little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		Numerous mitigation measures are used by the Navy during every sonar training event.
		Seasonal and geographic restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
La Chance, K.	It is absolute insanity to proceed with these war games in our states. I OBJECT! The poisonous results of such warfare games in our states is unconscionable. Stop this plan immediately.	This comment has been duly noted.
LaChance, R.	Please do not take NO ACTION to expand your military training protocols in the NW Training Range Complex. Please stop using sonar to the detriment of sea mammals. 200 feet is not far enough away to prevent hurting whales and dolphins.	The current sonar power down and shut down zones are based on scientific investigations specific to mid-frequency active (MFA) sonar for a representative group of marine mammals. They are based on the source level, frequency, and sound propagation characteristics of MFA sonar. The zones are designed to preclude direct physiological effect from exposure to MFA sonar. Specifically, the current power-downs at 500 <a href="mailto:yards">yards</a> and 1,000 <a href="yards">yards</a> , as well as the 200 <a href="yards">yard</a> shut-down, were developed to minimize exposing marine mammals to sound levels that could cause TTS and PTS. These safety zone distances were based on experiments involving distances at which the onset of threshold shift were identified. They are also supported by the scientific community.
Lagergren	I am constantly bothered by the noise generated by USN aircraft flying over the North Cascades National Park Complex. This area is under your Darrington OPAREA. For years now there has been increasing activity here and it is disturbing the hear when one is trying to get a Wilderness Experience while hiking and camping in these beautiful Mountains. Many is the time that I have reached the high point of a hike where I intend to relax and make camp or have a meal before I return to the trailhead only to have a P3 arrive nearby to set up a pattern and do Wifferdills for for a long period. This effectively spoils the experience of rest and relaxation that I came here to experience. In addition to the P3 it seems now that the aircraft which replaced the A6 is doing more and more maneuvers in this area too. They are slightly less noisy than the A6 but their presence is disturbing. Practically everywhere I go in this state is effected by the USN's noise. Kayaking in the San Juan Islands, hiking in the North Cascades, Bicycling in The Okanogan Area, fishing along the Bumping River 50 miles NW of Yakima. Driving in my car Near Hermiston, OR and there is another loud USN aircraft. I is no wonder that Whales and other forms of sea life leap out of the water to get away from your noise which is despoiling the environment over and under the water. I say move your noise out of the skies over the North Cascades and do not increase your sonar or any other activity which endangers sea life in the Northwest (anywhere in the World)as you are requesting in this EIS.	The floor of the Darrington OPAREA is 10,000 ft. Aircraft operating at or above that altitude have a low noise impact. Military aircraft operating below that altitude are likely on a military training route (MTR). These routes are not controlled by the Navy but are used by various branches of the military. Actitivities associated with MTRs are outside the scope of this EIS.  Likewise, low-altitude flight in the vicinity of the San Juan Islands is associated with NAS Whidbey Island operations, which are not within the scope of this EIS/OEIS.
Lahman	I would like to let you know that as a resident of Oregon who lives directly adjacent to the Pacific Ocean I am very interested in submitting comments	The proposed action does not include the use of low-frequency active sonar. Low-frequency sonar is that sonar below 1 kHz.

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	via this venue. I support the Navy's need for air, sea and under sea training. I feel the only objectionable activity is the production of low frequency sounds and vibrations underwater in the North Eastern Pacific region. I oppose any use of low frequency activities. There is no way for humans to know or understand what these sounds do to marine mammals and fishes. The first rule should be do no harm and there is no way of knowing what low frequency vibrations may do. Yes, sail on and fly over the ocean; but please leave the marine mammals and fish alone. Thank you, Mr. Gary D Lahman, Newport, Oregon	The U.S. Navy has conducted mid-frequency (1 -10 kHz) and high-frequency (> 10 kHz) active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Laing-01	1) I can only support the No Action Alternative.	This comment has been duly noted.
Laing-02	2) Everyone in Washington State knows that Puget Sound is a very vulnerable habitat. The health of the Sound has been continually deteriorating over the years. Declining fish populations and toxicity of sea mammals are a concern. For example, orcas now have so many toxic contaminants in their bodies, that if a dead one washes up on shore, its carcass has to be careful disposed of in a toxic waste dump. They are vulnerable to harm from sonar. And Orcas are only one species that would suffer. All would suffer, we just know to what degree.	Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the Draft EIS/OEIS.
Laing-03	3) Recently I attended the daylong conference sponsored by WSU called "Sound Waters." It was a full day of classes held where I live, on Whidbey Island, on how as citizens, we can all work together to save and improve Puget Sound. Citizens are doing a whole wide variety of things to improve the health of Puget Sound. Many on Whidbey Island do a wide variety of things to help preserve ocean life in general and the health of Puget Sound in particular. We use minimal pesticides because eventually those chemicals end up in the sea. We bring our own bags to the grocery store to avoid plastic bags which so often end up in the sea causing the death of sea turtles and other creatures. We have learned not to collect collect creatures from tide pools for our amusement. We carefully clean up after our dogs on the beach. We avoid stepping on seaweed and plants abecause of the critters that live underneath. When we pick up rocks to explore what's underneath, we put it back in its original position so that the critters who hide and live beneath the rocks won't be disturbed or exposed. People who lie on the water's edge and along stream banks do many more things to prevent polluted the water.	This comment has been duly noted.
Laing-04	4) What is the point of citizens being so conscientious if the navy does wholesale damage to the Sound with increased explosives and damage to marine life with increased sonar? Isn't it bad enough as it is that these testes have to be done at all? The Navy has not shown to me any real reason to increase its activities in this area. I don't see the need to increase the testing activities. I hope that with increased technology, more and more training can be done with simulated tests instead of real ones. Sincerely, Christine Laing	This comment has been duly noted.
Lamb-01	In reference to the proposed testing of weapons, high-intensity sonar and the dumping of uranium in Puget Sound waters, I want to say that I am in favor of	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight

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	the "No Action Alternative" (or less! )in the Northwest Testing Range Compexies Draft EIS," *(which would prevent the expansion of this testing	testing of unmanned aerial systems is proposed. Also, there is no sonar training within the Puget Sound.
	program.) In addition, I 2) oppose the Navy's testing of depleted uranium weapons anywhere;	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Lamb-02	oppose the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them;	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.
Lamb-03	4) oppose invasive testing of any kind in an underwater sanctuary	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Lamb-04	5) oppose testing of any kind without independent environmental impact research; and	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Lamb-05	6) oppose testing without viable citizen oversight of environmental compliance.	Civilian oversight and control is in fact a foundation of the U.S. military. As Commander-in-Chief, the President of the United States, a civilian, makes ultimate decisions about the training and operations of all U.S. military forces.
Lamb-06	7) urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems – as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.	This comment has been duly noted.
Lane	PLS protect our coast. It is valuable and valued by so many. Go with option 2. Thanks, your fan, Linda	Thank you for your comment.
Langdon	Per SeaTimes article dated 3-8-9, I am saying this. Go for it. As a ex-jar do what you need to do to protect our country and at the same time provide a good living space for those that serve, close to home. Better morale means better service to you and to us. Good Luck, Marc U.S.M.C. SGT	Thank you for your comment.
Lanigan-01	REF: The Navy plans to step up training and testing new weapons systems in the existing "Northwest Training Range Complex", I submit that: The Navy has not done proper Environmental impact analysis, is requesting unnecessary license to kill and destroy, and seems unconcerned about the cost and in such a time, that is totally unacceptable! Here are some of my objections:	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Lanigan-02	First of all there should be NO USE OF Weapons other than blanks (ie those that do not harm). If it is training then there is no need to kill or destroy anything. The ammunition is very expensive and in case you did not notice,	As stated in the Draft EIS/OEIS, live-fire training provides realism that cannot be simulated. Also, the live-fire phase of training facilitates the assessment of the Navy's ability to place weapons on target with the

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	we are in financial distress. And for the price of weaponry, I would certainly hope that the non-kill testing is a feature that the Navy sensibly requires on its purschases! Most of what is explained as justification for the need to test does not justify anything other then non destructive testing.	required level of precision while in a stressful environment.
Lanigan-03	There has not been enough public information or ability to comment.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Lanigan-04	This website is very limited in the information that it provides in ready format. At this link, http://www.nwtrangecomplexeis.com/EIS.aspx#atc , there should very clear information for each alternative including: have a full disclosure (including those provided by objective parties like environment group studies) on nuclear impact (if there is none, then it should be guaranteed in such a way as the Navy would be subject to very high fines);	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Lanigan-05	have a full disclosure (including those provided by objective parties like environment group studies) on sonar impact (if there is none, then it should be guaranteed in such a way as the Navy would be subject to very high fines). It is proven that sonar impact kills and maims whales, therefore it should not be used and it could never be justified for testing purposes!	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Complete analysis of potential marine mammal effects are discussed
Lanigan-06	The public hearings have also been lacking in reasonable public access of information.	within Section 3.9 of the Draft EIS/OEIS.  The public hearings exceeded the requirements of NEPA for public involvement. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.  Please see Appendix F of the Final EIS/OEIS for additional information pertaining to public involvement and notification.
Lanigan-07	Having the right to test the impact of your actions is not a license to kill or destroy and then assess the damage. It should only be interpreted to allow the non impacting tests those that do not kill or destroy and then assess their impact.	This comment has been duly noted.
Larch-01	The opportunity to comment upon this proposal is much apprecitated. I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine sanctuary, no less, and I	The U.S. Navy has conducted underwater detonations training and mid- frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the

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	emphasize the word sanctuary .	NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Larch-02	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, bad enough in itself, but some of it people eat, even worse.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Larch-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Larch-04	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.
		To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Larch-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.

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Larch-06	Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Larch-07	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Larch-08	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Larch-09	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Larch-10	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean
		bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson

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		abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Larch-11	In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	As described in the Draft EIS/OEIS, the Navy complies with the National Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Larson, A.	In review of the Northwest Training Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement (NWTRC EIS/OEIS), the San Juan County Council would like to go on record with comments.  We understand the U.S. Navy's mission and appreciate the need for training and military readiness. Although important, we have considerable concerns	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  The proposed action includes increases in the number of certain activities
	regarding doubling the number of sorties as noted in the EIS/OEIS Alternative 1 and 2.  We ask that you continue to keep the flights at a higher altitude so as to	while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several
	minimize the impact over our local residents. Furthermore, we encourage NAS Whidbey to maintain its current policy to direct flights over water and avoid flying over our islands as much as possible.	decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur
	In addition to the impacts on our residents, we are also very concerned about the stress on our biological and natural resources. The San Juan County Council has made it a priority to protect our natural resources.	in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.
	We look forward to having you or a representative visit San Juan County to address our concerns and explain your future plans and policy. Please accept our invitation for further dialog on the impacts to our community.	
Larson, J.	To be a party of record and retain future opportunity for legal action, I express my concerns that these proposed increased activities have not had comprehensive analyses provided regarding associated impacts. By reference, I incorporate all the questions/concerns enumerated in Rosalind Peterson's 2/21/09 article of concern; Warning to the Western States:You are about to be used For Target Practice. Especially of local concern are exascerbating the recent losses of various bird, whale, and salmonid species,	This comment has been duly noted.

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	AND questionable practices regarding disposal of military operation materials/wastes, plus enhanced power of sonar technologies.	
Larson-Foster	I support the NO ACTION ALTERNATIVE, regarding the proposed NWTRC expansion. The EIS is flawed, short-sighted, & self-serving. As a WA state citizen and coastal resident, my concerns are for the degradation of: our natural environment, our citizenry health & welfare, our coastal tourism industry, & our property values. Please also note that it is a priority of our newly ELECTED federal administration to PROTECT OUR NATURAL RESOURCES & move towards a CLEAN FUTURE. I appreciate the importance & function of our US Navy, but enough is enough!	This comment has been duly noted.
Lawhon	If no chemicals are released into the waters and air, no explosives are used on ground, in the sea or in the air, and no excessive sonar levels are used in the ocean, go ahead and conduct your training.  It appears that you are planning to conduct numerous warfare tactics in the region that is a major migration path of whales, salmon, and other marine life without any regard for their wellbeing. Birds and rookeries will also be impacted. This is a pristine environment in our Pacific Northwest. Instead of focusing on war, how about focusing on peacekeeping such as helping those less fortunate that we, using manpower to rebuild that which we (or others) have destroyed. Stay away with your guns and explosives. Celebrate life - not death!	This comment has been duly noted.
Lawrence-01	To whom it may concern:  I am very opposed to the Navy's plans to increase training for Washington-based crews in its Northwest Training Range Complex, off the coasts of Washington, Oregon and northern California. The increased operations At NAS Whidbey means that Whidbey's aircraft will fly more frequently over the San Juan Islands.  I had a personal experience with this just the other night. At approx. 6:25 PM on Feb. 24th a jet flew over our house so close I literally thought it was going to crash into our house. The windows shook and the ground shook. I nearly had a heart attack it was so frighening. My husband and I run a farm on San Juan Island and raise stock as well as very expensive horses. The noise from this incident and incident's like this could easily frighen our livestock and run them into fencing inflicting injury or demise for the stock and our horses.  Please do not increase the training. I would prefer you decrease the training as it already is extremely disturbing to our lives and the lives of all who live here.  Lisa Lawrence	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Lawrence-02	We respectfully ask that you add our organization to the list of those opposed to this plan. The sonar testing has already wreaked havoc with our whales, and they need a reprieve from this obtrusive practice. Please, consider abolishing this additional testing. Thank you Jill Lawrence	This comment has been duly noted.
Lawson	This testing will obviously affect the wildlife of the region and should not be	The proposed action includes no live bomb, or chemical testing, but rather

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	allowed. We must preserve what is left of our valuable resources. There is no excuse or urgency that can justify this breach of environmental stewardship. Please put a stop to the sonar and bomb or any chemical testing. Thank you for considering our comments. Andrea Lawson	the training of Navy personnel with established systems.  The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Le Baron	I am against increasing flights over the coastal region and the environmental and health hazards of such flights, not to mention the horrible noise and disruption to our peace and quiet. The Orcas will be affected, as well as all the birds and marine life in the area. Our world is increasingly polluted with noise & air pollution. This is not helping Global Warming either. You need to act responsibly in the spirit of saving our Earth from further assaults.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Leahy	I strongly object to any increase in the use of sonar off the Oregon coast. I strongly object to any increase in the use of submarines or any other warships in the whale migratory routes or the sea bird nesting sites or the salmon migratory routes or the sea mammal or sea bird roosting or nesting site areas. I strongly object to any increase in sound, vibration, sonar, radar, any form of chemical discharge in any of the above mentioned routes and areas. I strongly object to any increased naval presence or naval usage of the ocean waters off Oregon. There is an entire planet's waters for the navy to work in. The navy does not have to work in Oregon's waters. The sea mammals and sea birds are decreasing desperately, we do not need the navy burning imported oil off the coastline, nor do we need the navy deafening the whales with sonar so that they beach on the shores and die. I strongly object to any form of increase of navy presence or naval usage of the ocean waters near Oregon.  Sharon Leahy	This comment has been duly noted.
Lechnowsky	I submit my request that Northern California be excluded from the expanded Navy Northwest Training Range Complex and related activities.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Leeds	I strongly object to the installation of the Northwest Range Complex for many reasons. Please reconsider and cancal any plans of this sort. Thank you.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include building or expanding the range complex, but to continue training in the same area as they have since World War II.
Lehr	I appreciate all the efforts and consideration Naval Air puts in to conserving the environment and limiting the effects of training on the surrounding population.  It is the "Sound of Freedom" and I recognize that NAS Whidbey is key to training our pilots for their service to us, especially in the dangerous	This comment has been duly noted.

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	procedure of Carrier landings. Keep up the good work!	
Lennox	Please, please do not extend the military training zone on the northwest coast! I am a resident of Mendocino, CA and our town is famous as a beautiful historical town where people can watch the whales' migration from the headlands. Expanding the range of area used by the navy for underwater weapons testing is extremely harmful to the environment, and it would disrupt the whales' migration and wreck the delicate ecosystem of our north-western waters. Please do not be so callous to the environment in a time when we need to be protecting it.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex, and therefore not part of the proposed action.
Levin, K.	I am opposed to the Navy's proposal for weapons testing in the pacific northwest. This pristine environment will be degraded and raped if you conduct air, land, and sea missions here. Marine life will be harmed. Air and noise pollution will occur. We do not want sonar-bouys in our water nor do we want blasting, explosions, missiles, etc in our air or on our lands. This is a sensitive part of the world, relatively unspoiled, and I want it to remain that way. With all the advances in technology, surely the Navy and other armed forces can come up with better testing methods that are not environmentally devastating. I am adamantly opposed to the development of the Northwest Training Range Complex. Dr. Kerry Levin, DVM, CVA	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Levin, P.	Kindly do NOT use our coast and our Marine life for your war games. The ocean is a major part of what keeps this planet in balance; to do this it must be healthy. It cannot be contaminated by radiation, phosphorus, sonar, chemicals, explosions. This is severely disrupting and damaging to all life in the ocean and therefore to all life on the near coasts and even inland. There has to be some other way to accomplish what you want. First of all, is it even really necessary? How about using all that money to protect life instead of endanger it? Pamela Levin, RN	This comment has been duly noted.
Levine, J.	I do not want the Navy doing any exercises off the coast of California. I do not want the Navy testing the powerful new sonar that might cause damage to marine life anywhere.	This comment has been duly noted.
Levine, M.	Using live weaponry in a heavily populated area that is also a critical habitat for sea life is neither "safe" nor "controlled." There is no adversary now or in the foreseeable future who might attempt a naval invasion of the California coast. This is not only a terrible waste of resources at a time of scarcity, but an ecological disaster in the making. Please call off your bombs, missiles, and exotic electronic weapons, and respect the people and environment of California.	The Navy does not propose the use of live weapons in populated areas, but far at sea, in areas where there are no other vessels or people. The purpose for the Navy's activities is not to patrol the California coastline in defensive operations, but to conduct required training. The Chief of Naval Operations (CNO) is mandated by Federal Law to ensure the readiness of the Nation's naval forces. The CNO meets that directive, in part, by conducting training such as that conducted in the Northwest Training Range Complex.
Levinson-01	Love our military, just would like to ask they assess the true need to fly over over the San Juan Islands for their training. There are some places still left somewhat as nature intended and the islands are an attraction to many for their serenity as well as beauty. Pilots, please come visit us; not fly over us! Thanks for listening. Lauren Levinson	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed

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		action flights would not increase over the San Juan Islands.
Levison-02	Please do not increase your naval testing presence on the Oregon coast. I am concerned about the effects of sonar on sea mammals, and am also concerned about the construction of additional underwater mine fields.	The analyses of sonar effects and the underwater minefield are described in the Draft EIS/OEIS.
Lewallen	It is suicidal for the United States Navy to use the Pacific Northwest offshore ocean waters for military tests of toxic elements, sonar devices, explosions, or anything else dangerous to the safety and purity of the Pacific Coast Ocean Upwelling Ecosystem. This rare and unpolluted coastal ecosystem is teeming with edible seaweed, fish, and human beings, who have been a natural part of this food-rich ocean environment for thousands of years. Now, as our nation plunges into economic stress and our citizens need the essential trace elements of clean, wild ocean food, let's not kill ourselves by spending precious resources poisoning our essential food supply.	This comment has been duly noted.
Lewis, C01	I love the Navy and you people are generally wonderful, BUT the area you are envisioning extending your training grounds into is much too delicate to survive your ingress.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Lewis, C02	Move your training grounds far away from offshore and the inland waters! Why don't you train in the dead zone that's already growing off the coast? At least there's nothing you can harm there.	Section 2.3.2.1 of the Draft EIS/OEIS describes why alternative range locations fail to meet the purpose and need of the proposal, and were therefore eliminated from further consideration.
Lewis, D.	The Port Townsend Religious Society of Friends (Quakers) is concerned about the effects of increased military training in the Northwest Training Range Complex. The increased use of high powered and explosive sonars, missiles and munitions will have a detrimental effect on the ecosystem of the Puget Sound. One area of concern is the increased use of mid-range sonar, which environmentalists and the Navy alike find damages nine groups of endangered or threatened marine mammals. We support the "no action alternative" as the best means offered of protecting and preserving our local ecosystem. This statement was approved at a business meeting on March 8, 2009. Deborah Lewis (acting Clerk) of the Port Townsend Quaker Meeting	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Lewis, M.	The plan to expand Navy training activities off the West coast is a terrible idea. Please stop.	This comment has been duly noted.
Lewis, P01	Please consider extending the public comment period. This initiative is wide ranging and many questions remain unanswered. Specifically:  1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year? 2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Lewis, P02	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Lewis, P03	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.

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Lewis, P04	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website.	The Navy's primary jet fuel is JP-5.
Lewis, P05	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in th
Lewis, P06	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Lewis, P07	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	The potential impacts of all chemicals used in the proposed activities are found in Section 3.3 of the EIS/OEIS. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Lewis, P08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.

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	programs and their toxicity.	
Lewis, P09	10 - How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Lewis, P10	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well. 12 - Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Lewis, P11	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military?	No.
Lewis, P12	The Northwest Training Range Complex plan should not be approved till the public have been fully informed about it e.g., until multiple public hearings have been held about it, in all of the states and counties within range of it, and all these concerns are addressed to the public.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its
		emphasis regarding public hearing locations.
Lewis, R.	My preferred alternative would be the no action alternative.	This comment has been duly noted.
	The military needs to address the current state of affairs in the world.	
	The US in by far the most aggressive nation on the planet and needs to "stand down," demilitarize and deconstruct the illigitimate military bases around the world.	
	The best way to start is right in our own back yard.	
	The Navy has everything they need to train. How about leaving some areas to the rest of us.	
	We need quiet, peaceful areas to raise animals and gardens. This proposed expansion goes against the current economic reality.	
	We need to reduce our military. Streamline it for today and cut the fat!	
	So start cutting the fat right here and right now with a no action finding.	
	Sincerely Richard Lewis.	
Lewop	I think this is a terrible idea. I do not like it at all. You suck.	This comment has been duly noted.
Li	Use of active sonar is hurting and perhaps killing whales by sending out high- pitched tones. They say studies show the piercing underwater sounds cause whales to flee in panic or to dive too deeply. Whales have been found	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine

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	beached in Greece, the Canary Islands and the Bahamas after [high energy] sonar was used in the areas, and necropsies have shown signs of internal bleeding near the ears. We are totally against the high-intensity sonar testing!!!	mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Appendix E of the Draft EIS/OEIS provided a complete analysis of the
		relationship between sonar and marine mammal strandings.
Liess	While military operations and training are important, defense is best served by international diplomacy.  As I understand them, the proposed operations are going to add clutter to an already polluted ocean floor (i.e. "inert mines"). I also find it unconscienable to knowingly interfere with the life and well-being of whales in particular, and undoubtedely other species as well. Unless 'we' are planning to provoke/recieve an attack involving these particular waters during migration seasons, it appears that these operations are mostly a waste of life and taxes. If public input is to go unheeded, please at least consider modifying operations to avoid migration routes/seasons, and see to it that inert mine placement is truly temporary. Can I trust you to do that?	As described in the Draft EIS/OEIS in Section 2.6.2.5, the training minefield would consist of inert mine-like shapes in an area approximately 2 x 2 nm. This installation (location to be analyzed in a separate environmental study) would be permanent, not temporary.  The purpose for the Navy's activities is not to patrol the California coastline in defensive operations, but to conduct required training. The Chief of Naval Operations (CNO) is mandated by Federal Law to ensure the readiness of the Nation's naval forces. The CNO meets that directive, in part, by conducting training such as that conducted in the Northwest Training Range Complex.
Lillestol	Please do not increase the activity at Whidbey. The noise is currently at times unbearable. I can't imagine that it will get worse. The noise greatly disturbs wild life, pets and livestock. I can't even hear the person next to me when the flights are nearby. I would like to see the funds go to sustainable long-term jobs/industries that are more peaceful in nature. Thank you for your consideration.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Lindsay	I am in favor of the "No Action Alternative" in the Northwest Testing Range Compexies Draft EIS," which prevent the expansion of this testing program. I oppose the Navy's testing of depleted uranium weapons anywhere and particularly oppose the use of underwater tests that might damage the hearing of the orca whales that live in Puget Sound and other aquatic life or cause other harm to them. I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems – as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Lindstrum, Anna	I am writing to say that I believe that the Navy's proposal to increase test flights over the San Juan Islands is unacceptable. There is already a great deal of air traffic in the area. The Navy jets are very loud and would disrupt	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could

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	the animal populations as well as the human inhabitants. Annual bird migrations could be effected by the noise of jets. The tourist economy would be effected as well. The San Juans are known for their natural landscapes and many parks, the noise of the jets would be a huge deterent to tourism. Thank you, Anna Lindstrum	increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Lindstrum, Arvid	I am opposed to increased activity in the San Juan County and Juan De Fuca Strait areas.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas could increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Lingle-01	I am completely opposed to your proposed training range expansion. I feel that you are trying to sneak this terrible idea by by not making in public.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Lingle-02	I want to know what chemicals you plan to use, what weapons you plan to test and what independent evaluation has to say. Whatever you are trying to do, STOP IT NOW or until the public has has sufficient time to comment and the information given has been reviewed by an independent panel.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Linnett	No Navy munitions training should be done in the Pacific off Oregon or Washington because of numerous safety, commercial and environmental concerns. Stop now.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Lipsky	I urge the U.S. Navy to stop needlessly inflicting harm on whales and other ocean life with its use of high-intensity, mid-frequency sonar in its training exercises. Whales, dolphins and other marine mammals depend on sound to navigate, find food, locate mates, avoid predators and communicate with each other. Blasting their environment with intense sound over large expanses of ocean disrupts these critical behaviors and threatens their survival. Sonar also harms whales more directly: Navy exercises using mid-frequency sonar have resulted in whale strandings across the globe, including along the coasts of Washington State, the Canary Islands, the Bahamas, Madeira, the U.S. Virgin Islands and Greece. A recent whale stranding death in Hawaii, which occurred when a large pod of whales was driven in panic to shallow waters, took place with Navy sonar exercises nearby and may be the latest in this string of sonar casualties. Whales should not have to die for military training. The Navy can no longer ignore the unnecessary harm inflicted by this technology. I urge the Navy to immediately adopt common-sense measures to keep whales safe.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.

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Litfin	Dear Madams and Gentlemen, I have only recently learned of your plans for weapons testing in the Puget Sound region. As a professor of international politics and environmental studies, I am a strong proponent of public participation in the Environmental Impact Statement process. So I am deeply concerned, not only about the environmental and health effects of your proposed testing but also about the fact that the public has not been given adequate time and notification to respond. I urge you to extend the time for public comments and to make as much information as possible available to the public regarding the substances that will be flowing into our waters and our food system. Sincerely, Karen Litfin	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Lodge	Please consider the effects your proposed expansion will have on our fragile ocean habitat. We live on a water-based planet, & as sentient, industrial beings hold the responsibility of it's stewardship. We can no longer afford to inflict damage upon our planet or it's inhabitants. I strongly oppose the current & future expansion of the Northwest Training Range Complex.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Loew	I am writing to support the "No Action Alternative" which maintains the current level of training primarily due to the lack of information available to assess the impacts of the Navy's proposed expansion on the already declining bird, fish and marine mammal species that inhabit the proposed training range. The EIS is particularly inadequate in describing the quantities and ecological effects of discarded metals and chemicals, including depleted uranium and the potential for oil spills or ship collisions. The lethal and injurious effects of sonar and explosives are not adequately assessed in the EIS. The oceans, on which our lives depend, are already threatened without implementation of this plan. There are more skillful options for maintaining and improving our security than creating more stress on our already threatened oceans and the ocean life we depend on.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Long, Suzanne	Name: Suzi Marquess Long Organization/Affiliation: Citizen of USA, resident of Mendocino County Address:* 45098 Main Street City, State, Zip Code: Mendocino, CA 95460 Comments: I've never been in the USA Military Service, but I have to believe that you who are have enough intelligence to realize that all the testing done to determine harm done to sea mammals by sonar and other submarine sound waves is horrendous and destructive to our wildlife creature of the sea. Please consider the damage you would do to uncountable species of sea creatures if you continue with sub-marine testing in the Northern California waters of the Pacific Ocean. Perhaps you could use Lake Superior for your tests where there are no whales, no dolphins, no seals, sea lions, etc, and enough water volume to conduct your tests satisfactorily. I beseech you to stop and think and project what the future might look like if you pursue this avenue of testing.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Long, Sue-01	Thanks for taking comments. I first implore you to extend the period as this	To ensure the public has ample opportunity to comment, the comment

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	endeavor of expanding and increasing the testing activity is so significant to our ecology.	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Long, Sue-02	I have grave concern for the safety of the marine mammals that will be impacted by the testing. I strongly hope that you will use acoustical listening devices for detecting their presence as well as well trained whale biologists. Our local whales already have heavy toxic loads, the Orca of 2002 that died in Sequim, one of the most toxic marine mammals ever tested.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Long, Sue-03	I don't feel that the cummulative effect of the toxins released during the testing has been adequately addressed. I implore the Navy to take the No Action Alternative at this time. The change in the administration may foster better diplomacy and a shift in improved international relations. Please give this new administration time to work diplomacy and refrain from taking action on the sonar/missle testing activity. Thank you for considering public input in how we may most feel protected. The environment we depend on also is a priority in insuring a safe world. Sue Long	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Louchard	I am very distressed that there will be toxic and dangerous Navy activities off the coast of Washington and other coastal states that can compromise the life in the ocean as well as our own, especially children who are extra sensitive to contaminants. If there is any other way to accomplish your objectives, please, do so. If you destroy us to protect us, what sense does that make?	This comment has been duly noted.
Loustaunou	Please listen to reason we must stop killing and torturing all humans and animalsbesides the cruelty of it, the expense is prohibitive just STOP NOW!!!!!!!	This comment has been duly noted.
Lovejoy-01	I prefer the first, The No Action Alternative, comprised of baseline operations and support of existing range capabilities. Training and unit-level activities would continue at baseline levels. The Northwest Training Range Complex capabilities would not accommodate proposed force structure changes or provide range enhancements.  I definitely oppose ANY use of Depleted Uranium anywhere near our coastline, as it is far too risky and harmful to humans and other living things.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in

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	We already have adequate military coverage and training with our current status.  Thanks.  Liz Lovejoy	Section 3.3.1.1.7.
Lovejoy-02	I oppose the use of our coast for any live ammo trainings. Furthermore, I oppose any sonar testing as it has been proven to harm the whales, dolphins, seals, sea lions, elephant seals and other marine species. You can train without using live ammo or the super sonar that harms sealife going through the motions is valuable, ask any police or firefighter, they spend hours training without harming us.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Lubow	Please stop using sonar tests, which kill marine mammals. Your mitigation plan isn't good enough. Whales and other marine mammals are fatally injured by these tests. When is the US Navy going to care about the earth and the innocent creatures on the earth?  Please listen to public and scientific opinion and stop the use of sonar tests in the ocean.  Thank you.  Judy Lubow  Longmont, CO	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Some restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.  The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standards Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Lucas, K01	I write to oppose the Northwest Training Range Complex. The project should not go forward as planned. I find the document vague and difficult to understand. More research and a more comprehensive report on environmental impacts are needed, especially with regard to endangered species such as the whale.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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Lucas, K02	I was shocked to learn about these plans, and particularly—that the planned training range covers the Olympic Coast National Marine Sanctuary! I opposed the Navy's use of sonar and now it intends to increase its use!	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Lucas, K03	This is absolutely appalling! Additionally, there are countless human health and quality of life issues that have not been adequately addressed.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Lucas, K04	I further object to the timeline for this project. The public has not had adequate time to review the complex, yet vaguely prepared, 1000-page document. As written, I oppose this project and ask that you not approve it. Kyle Taylor Lucas	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Lucas, T.	As the son of a Navy veteran of the Korean war and grandson of a USMC Silver Eagle, I wholeheartedly support the effort to accomplish the goals stated in the training proposal. All too often a vocal minority rants loudly about any changes, and infects politicians with the same viral problem. I want the USN to know that the vast majority of the people in Oregon want to see this project proceed for the betterment of our armed forces. Please know that I speak for a lot of other people who don't want or have the time/ability to write and let you know about this. Please don't let your decisions be swayed by a ruthless group of environmental extremists who find fault with everything, and offer no solutions to needed and reasonable progress. Thanks to the United States Navy for all you do.	Thank you for your comment.
Ludwig	The increase in flyovers has a significant negative impact on quality of life and real estate values on South Lopez Island. I've seen little to no recognition of this in the existing comments. What are you going to do to mitigate the impacts for homeowners, and to address the impact on real estate values?	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Luke	No, no, no! We do NOT need to be spending more money on "defense." People are homeless and without food to eat!!! Please, please, please take another think about spendingwasting, reallyAmerican money in this way. I am a former Navy brat, and I am sure my father, who spent 26 years in the Navy and served in three world wars, would agree with my comments. Thank you for actually reading this	This comment has been duly noted.
Lusak-01	This is concerning the Navy's proposal to increase training offshore from Northern California all the way to Canada. My understanding is that they want to operate anywhere they feel is appropriate, using sonar operations that disrupt whales, dolphins and other marine mammals, using high and low	The purpose for the Navy's activities is not to patrol the California coastline for homeland defense, but to conduct required training. The Chief of Naval Operations (CNO) is mandated by Federal Law to ensure the readiness of the Nation's naval forces. The CNO meets that directive,

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	altitude aircraft, target bombing "nearshore", and military troop landings and operations "onshore". These kinds of operations are unacceptable to the general public living in these areas, they are dangerous to marine life, and they are completely destructive to the natural environments which they are trying to "protect" with these types of operations. If this is to be done in the name of "homeland security", I would suggest that we would be more secure without these types of invasive wartime operations at home here on the northcoast.	in part, by conducting training such as that conducted in the Northwest Training Range Complex.  Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the Draft EIS/OEIS.  Military troop landings are not part of this proposed action.
Lusak-02	I am writing as a concerned citizen and resident of northern California. I live near the coast, close to Shelter Cove and the King Range which is a BLM wilderness area. Our rugged coastline here is well known for its beauty and also its unpredictability. It is a source of income to the state for tourism as well as sport fishing. Our coast has remained uninvaded for years because of many peoples' efforts to keep it pristine and untampered with, in keeping with these tourism, fishery and wilderness values. I personally was involved in the struggle to save the redwood trees in the now wilderness Slnkyone State Park. It has been a long struggle, and the struggle goes on. The plan to put troops and sonar devices in and on our coastline is abominable, and must be scrapped as such. It is a holdover from the anti terrorism fraught days of George W. Bush. What we need to protect here and elsewhere are our natural resources for future generations to benefit from and survive with.	No activities are proposed that would be conducted on shore or over the states of Oregon or California.
Lusak-03	I teach at a small local school here on the coast near Shelter Cove, and I can tell you that any time there is this type of low flying aircraft pattern here, which is not very often thankfully, it is completely disruptive to the school learning environment. I cannot imagine a worse type of idea, as a matter of fact, and I am very concerned that such a thing is even in the realm of possibility here.	Air activities as part of this proposed action occur 12 nautical miles or further from the coast of California and Oregon.
Lusak-04	Sonar devices disrupt the ocean ecosystem, making it difficult if not impossible for whales, dolphins and other marine mammals to survive.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Lusak-05	As for the disruption to marine life, this matter comes up because of the unbelievably bad judgement of our past President, George W. Bush. He has negated the laws and protections that we have had, environmentally speaking here on the North Coast and elsewhere. His lack of ability to foresee these negative consequences, and his ties to corporate and other interests have had a bad effect on all of us. Marine life is important to our	This comment has been duly noted.

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	survival as a species, believe it or not, and it only takes a bit of scientific exploration to realize that we are cutting our own throats to disrupt the natural patterns of marine mammals that provide us with important elements for survival.  In these times of economic hardship and global change and challenge, it would behoove us to use our creative intellects in a more productive fashion. Perhaps we could better protect ourselves by protecting the natural environment and the creatures that live within these environments. This would include marine life as well as human life.	
Lusak-06	Low flying aircraft disrupt animal life on the ground, causing them to flee in terror and sometimes injure or even kill themselves. School environments are also disrupted by these intrusions.	Air activities as part of this proposed action occur 12 nautical miles or further from the coast of California and Oregon.
Lusak-07	I am strongly opposed to this proposed increased activity here in the "Norhtwest Training Range Complex", and will continue to oppose it with future generations in mind.	This comment has been duly noted.
Lusak-08	I strongly oppose the idea of Naval operations on our coast here and on up to Canada. We have so little area of our coast that is pristine, it would behoove us to keep this area protected from such intrusions. For the survival of marine life, as well as our grand children, please do not allow this project to go through.	This comment has been duly noted.
Lyda	I support the Navy in all aspects of training including in my back yard (the Pacific Ocean). In Sailing World March 2009 page 58, Eight Steps to a Better Season. Step one (sail a lot). I am a Sailor and a Diver I know the more you do it the better you get at it. I have lived on the Oregon Coast moast of my life. In the 70 and 80 the Air Force woulds fly so low it would blow sand in your eyes on the beach. I could look down on the planes from my house. That was ok by me. My friend's son is serving in Coast Gard and flys over my house now and then so I can wave at him. What a joy! The Navy is not some goverment agency. It's our sons and daughters protecting our way of life. If this traning range would require me to never sail again it would be a cheap price to pay for the training of our service men. I was at the Newport Oregn Jan 30-09 Hearing. I am in full suport of the Training Range.	Thank you for your comment.
Lynette	Please work to extend the comment period for the DEIS on the proposed Navy Northwest Training Range Complex until the public has had a chance to evaluate the proposal. This appears to be a rush job without transparency. Most importantly, please work to delay any implementation of the program until the public has had an pportunity to understand it better and has iterated its various proposals with WA State personnel. Thanks	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Macdonald, B.	The Mendocino Coast is a resource stewardship area that is committed to the health of our ocean-river environments to save endangered species and maintain the health of our environment in general. Cetaceans, Salmonids, and many other species are dependent on our efforts to restore our	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  Mendocino County and its coastline are outside of the range complex,

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	environments to the recovery and support of these species and we are having difficulties in just keeping up with the degradation caused (and proposed) by market forces.	and therefore not part of the proposed action.
	Our economies have been decimated by the previous damages of excessive logging and overfishing and we desperately need to improve the ocean and forest conditions to restore this land to a sustainable condition supportive of our return to sustainable, resource based cmmunities.	
	Pursuant to that goal, I am deeply concerned that naval operations in this environment will subtlely and permanently alter the ecology in ways that we are now unaware. Some of those operations are:	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine
	* High power sonar kills and damages marine life and certainly disorients ocean vertebrate communications and communities.	mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the
	* Detector array depolyment presents risks to the general health of marine life and is of concern for commercial and sport fishing operations.	fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is
	* High intensity naval operations can emit significant hydrocarbon emissions and sonic disruptions affecting marine life and local ocean traffic.	little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
	* General high-level marine activities degrade the rural-oceanside atmosphere that attracts our only industry - tourism.	The other issues raised in this comment are all addressed in the Draft EIS/OEIS. The analysis concluded that there are minimal impacts to the
	* General activity bears the risk of small oil spills and other, military chemical	resources listed in the comment.
	events that would dramatically affect the sensitive ocean/river interface which is critical to recovery of our several critically endangered species. This aspect is furthr complicated by the presence and fecundity of this most productive upwelling in the northern hemisphere.	The training that the Navy proposes is essentially the same as has been conducted for decades in the NWTRC with no resulting injuries to marine mammals or destruction of habitat.
	I thereby request that only option 1 (no change in operations)be the choice in this matter.	
Macdonald, C.	There is no reason for military training to take place over the Puget Sound or the San Juan Islands. Please keep doing it where you have been doing it. The noise and air pollution would contribute to the ruin our environment. Water pollution is killing our marine life. Don't we have enough to contend with?	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
MacDougall	I am opposed to the Navy's plan to expand their firing range to beyond the current limits on the Pacific coast. The protection of our oceans and sea life is of utmost importance to the survival of humankind.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
MacFarlane	I SUPPORT A STRONG PACIFIC PRESENCE! Our biggest threats are North Korea, China, Russia, and Iran. We need a strong defense from these nuclear threats. PLEASE know your work to defend America is supported, desired, necessary, and appreciated. Good luck dealing with the environmental morons!	Thank you for your comment.
Machala-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington, Oregon and California shores. This is in a Washington marine sanctuary, no less.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of

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		Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the
Machala-02	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life.	National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Machala-03	The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Machala-04	It is inaccurate for the Navy to average potential pollutant concentrations over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.  Please see Section 3.6.2.2 of the Final EIS/OEIS (Deepwater Benthic Habitats beginning on p. 3.6-18) for a detailed explanation of this method. Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Machala-05	And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area meant to perpetuate species as naturally as possible.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Machala-06	There is a lack of information available to assess the impact of radioactivity,	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their

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	heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Machala-07	There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Machala-08	The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Machala-09	The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Machala-10	The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. Please be aware that these activities are opposed by most residents of these coastal watersand we pay taxes to support the military.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or

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		trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Machover	As a concerned resident of the San Fransisco Bay Area, I am voicing my opposition to expanded Navy training along various West Coast regions. Sonar has been shown to have a strong correlation with the deaths of marine mammals in the Puget Sound bio-region and elsewhere. Although this correlation does not prove military activity has been killing our marine mammal wildlife, it has not been disproved. As a general rule I would advise refraining from introducing artificial human-made things into nature without knowing their effects. Given that there is significant evidence about military activity harming marine life, I would think it be wisest to take such a precautionary approach here. Thank you for taking the time to hear the thoughts of a concerned West Coast citizen. Sincerely, Shane Machover	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Mackrow-01	While recognizing the need to maintain military readiness through training, the "no Action Alternative" (maintaining existing training levels) is all that should be supported at this time due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's proposed expansion on those species.	This comment has been duly noted.
Mackrow-02	As a resident of remote okanogan county, my family expects the Navy will respect private property, protect us from potentially toxic residues such as depleted uranium and other environmental harm. Please reduce the incursion of low flying fighter jets that scare our children, stress our livestock and generally harass citizens in their homes. Posse comatus laws must be enforced and the trianing areas not expanded onto private property.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
MacLeod	I am very sad to hear of the Navy's plans to expand "training" activities off the western US coast. I am very opposed to this expansion, and am equally opposed to this activity done anywhere, by anyone. We must end war and warlike activities which includes planning and training of such activities. At	This comment has been duly noted.

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	this time in the world's history, when we have the capacity to destroy all life on Earth, the only solution is to immediately use only diplomatic solutions. Jesus taught us to love our enemies as ourselves, and to treat everyone as we would want to be treated. It is time to finally listen.	
MacQueen	What Are you thinking. Stop this insanity. Think of your children and future generations. Have the Navy start working on the infrastructure of our countrycreate, do not destroy and stop living in a fear based mentality. THINK.	This comment has been duly noted.
Maguire-01	I object to the Navy testing "depleted" uranium and using Sonar on the whales.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Maguire-02	The uranium isn't safe and will further damage the already fragile ecosystem of the ocean. And uranium doesn't go away for a billion years or more! The earth is already experiencing an environmental crisis, the oceans are polluted with toxins, the salmon in the Northwest aren't as plentiful as they once were. Some Orca whales are endangered, and the Navy's plan to bomb the oceans with uranium and subject the whales and other sea creatures to ear-drumshattering sonar is a bad idea.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Maguire-03	What will happen to the already endangered whales if you do this? Sonar has been proven to severely damage whales hearing, which is how they navigate. And they are already overloaded with toxins. What will happen when people eat fish contaminated with uranium? What about the environmental implications?  Things are already bad enough. The ocean needs our help-not more pollution and destruction. Your plan proposes to poison the ocean and to harm sea life that lives there. Surely there is a better way to "protect" us. One of the Navy's jobs is in fact to protect the ocean and this plan does just the opposite. I strongly urge you to do your job and protect the environment, which will ensure our safety and the safety of other living creatures as well.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of

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		236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Mahon-01	I would like the review period for the EIS for increased training in Northwest waters to be extended to allow for public review and comment. I just heard about this today, and live in an area that would be significantly impacted by any increases. I would like more time to make judgements about this.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Mahon-02	At this time I would say absolutely not, the use of sonar in these waters should not be allowed at all, let alone increased due to our rapidly declining Orca population. Also, the Hood Canal and Puget Sound are environmentally sensitive waters, and are struggling under their current toxic load, and until this is addressed we cannot allow more impacts on its fragile balance.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Mahon-03	Last, but not least, I live under the fly zone where those planes practice! Have you tried to sleep or even be outside when they are active? It is awful, very disturbing and should not be increased. Thank you for your attention to this. Lisa Marks Mahon	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Main-01	As a citizen of Port Townsend and the Olympic Peninsula, I urge you to choose the no action alternative instead of expanding the Navy testing range in our coastal waters.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been

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		conducted in this same area since World War II.
Main-02	I also ask for an extension of the comment period so more outreach and educational efforts can take place.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Main-03	I am very concerned about the health effects of existing sonar testing to marine mammals and other sea life and any expansion would impact sea life even more.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Main-04	I am also concerned about the affect of all of these munitions used in testing to our water quality ad sea life. The public needs much more public education about the impacts of both existing and increased testing. Thank you for the opportunity to comment.  Carla Main	All water quality concerns of Navy actions are handled in Section 3.4. Water Resources.
Malinoff	We have lived on Lopez Island for more than 15 years. We moved here because we love the peaceful nature of the islands and the diversity of wildlife. It is a unique environment and we feel very fortunate to live where we wake to the sound of song birds in the wetlands and sleep to the chirp of frogs. The noise from the Navy jets is extremely loud. Alarmingly loud. It sounds like they are flying close enough to reach up and touch. And, my hearing isn't all that good. Imagine how it must sound/feel to the other creatures sharing the island. The Navy serves an important function in our defense and I understand that the Navy needs to practice maneuvers. However, an increase in flights over the San Juan Islands will have a detrimental effect on both humans and animals. Please consider the environmental harm from noise polution. Please do not increase flights over the islands. Thank You. Liz Malinoff	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Malley-01	please consider the following:Inadequate notice preventing meaningful public participation  NEPA requires public review process  Only one meeting in Oregon, inadequately noticed (no state-wide newspaper publication)	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Because the Navy's proposed activities would continue to be concentrated in or off the coast of Washington, three of the five scheduled hearings were held in Washington. Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan.

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		28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; and February 26, 2009-Tillamook, OR.
Malley-02	30-day extension: Ask NAVY to reopen public comment period to allow meaningful review	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Malley-03	Harmful effects of mid-frequency sonar on marine mammals Scientists have proven that military sonar can injure and kill whales Low-frequency sonar travels extremely long distances, retaining decibel levels much higher than those known to disrupt whale behavior	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Low-frequency sonar is not proposed for use in this EIS/OEIS.  The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise. Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Malley-04	Mid-frequency sonar is used more widely and has been associated with whale mortality including the stranding of whales in the Canary Islands, U.S. Virgin Islands, Vieques, Madeira, the Washington coast, Alaska, Hawaii, and North Carolina.  This doesn't include other injuries and deaths that may occur out at sea, which scientists agree are not likely to be documented	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.

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	The Navy's own investigation revealed that sonar caused the strandings and injuries	
Malley-05	Less visible impacts may include disruption of feeding, migratory routes, and breeding habits due to noise interference with marine mammals' own sonar navigation and communication	The issues raised in this comment are all addressed in the Draft EIS/OEIS. The analysis concluded that there are minimal impacts to marine mammals.
	There are 7 endangered species and 2 threatened species of marine mammals that inhabit this area and so special precaution is warranted.	
	Balance the need for national security with the protection of these animals by implementing common-sense safeguards –Bush administration rules are NOT ENOUGH	
Malley-06	Navy can better protect marine mammals by avoiding migration routes and feeding or breeding areas when marine mammals are present turn off active sonar when marine mammals and endangered species are sighted nearby	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.
	place important or critical marine mammal habitat areas in off-limit zones restrict use during seasonal migration periods  Monitor marine mammal populations	Some restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Maloney	This would be an outrageous assault on the environment and sea life.	This comment has been duly noted.
Mann	Looks to me like no one really knows the effect of these sonar tests. How about erring on the side of caution and for marinelife survival. These war games should be held in as remote an area as possible and certainly as far from the coast as possible.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Mariano	I oppose the expansion of naval operations in the Puget Sound area because of the known and unknown impact on the resident and transient whale populations that inhabit or move through the Puget Sound. These whales are an integral part of the ecology of the Pacific and need limited noise and industrialization, including military industrialization, to prosper. The full impact of this expansion cannot be known a priori. Some Naval operations already impact the natural ecology in this area in a problematic manner and should not be expanded.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
		There is actually a great deal known about the impacts of the Navy's training activities. The training that the Navy proposes is essentially the same as has been conducted for decades in the NWTRC with no resulting injuries to marine mammals or destruction of habitat.
		In the case of sonar and marine mammals, a significant amount of research has been conducted that provides a wealth of knowledge on the subject. The statement quoted in the comment cites the complexity of the issues as the reason there is still much more to learn.
		Where the science expresses uncertainty, the EIS/OEIS analysts and authors used a conservative approach, which likely overestimates the

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Marino	I urge you to stop the expanded Warfare Testing Program whereby you will "take" 32 species of marine mammals over 5 years! You are not killing our oceans for the sake of warfare! I am requesting that the California Coastline is protected as well as the entire ocean of the world and therefore your chemical and sonar warfare will cease to expand.	This comment has been duly noted.
Marman	I really do not think that you need these war tests. Our national budget cannot support these unnecessary and expensive exercises, and the amount of environmental destruction and financial and species cost greatly exceeds the amount of benefit that will be gained by your exercises. Please stop your testing until it is really necessary. Also, please stop the sounds testing near whale migration routes. Knowing the whales' sensitivites to sound, it cannot intelligently be argued that there is no damage to the whales. I am sure it is causing undiscovered damage to the whales' equilibrium, their species, their migration and their ability to prosper in the Pacific Ocean. Joe Marman, Attorney.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Marote	RE: Increased training schedule. I am supportive of well-trained staff. However, I do not believe that training should be at the expense of civilians. My frustration stems from the late-night training flights over Fidalgo Island. I have to get up early to go to work each weekday and these late-night training flights interfere with my sleep, sometimes for the entire week. Consequently my service to the public (I work in public health) is affected. I understand the need for training in the dark. However, in the winter dark comes well before 10:00 p.m. During the summer, if after-dark training is necessary, please limit it to once during the regular work week. I am supportive of more training but not at the expense of the health and well-being of civilians.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Marrett	The San Juan Islands are not only a peaceful haven for residents but our economy is based to a large degree on eco-tourism. People come from all over the world to the peace and quiet of our islands and to view wildlife-including endangered Orca whales - which are already stressed by the noise of boats. Please do not increase your flights over the islands. There must be some places left alone on earth for peoples' spirits to rest and be replenished.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Marshall-01	There was almost no notice of the meeting in Tillamook. Why?	The Navy was asked in the second week of February by the Oregon Congressional Delegation to hold an additional meeting in Oregon. By the time the Navy could coordinate a meeting location in Tillamook, and confirm its availability, only one week remained to inform the public. The Navy agrees with the importance of notifying the public early, and in fact had done so for all previous meetings in which the schedule was planned in advance. Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Marshall-02	The EIS fails to adequately address the real impact of these activities on fish and whales, and on the people and communities who depend on them for their livelihoods. Clearly the impacts of these huge decibels for sustained periods are not being realistically addressed. There is no way this will not	The issues raised in this comment are all addressed in the Draft EIS/OEIS. The analysis concluded that there are minimal impacts to marine mammals.

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	adversely affect individuals and groups of many species and the people who depend on them.  The Oregon coast should not be the next National Sacrifice Zone. Instead of destroying so much of our precious coast, maybe computer simulations can be used.	
Mart-01	I believe the public review period needs to be extended beyond March 11th to allow more citizens to review this project and make comments.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Mart-02	I am very concerned about the potential environmental impacts on multiple resources, like air quality, water resources, airborne acoustic environment (on land and in the ocean), biological resources, marine and terrestrial impacts and human health and safety.	The issues raised in this comment are all addressed in the Draft EIS/OEIS. The analysis concluded that there are minimal impacts to marine mammals.
Martin, A.	Consider the impact of sonar testing in the ocean on our wild life and on our future generations. Keep our waters safe for the life there. Find an alternative to sonar testing in the waters.	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems. Impacts have been analyzed within this EIS/OEIS.
Martin, J.	Please do not use the Pacific Northwest waters for sonar training. The irreparible harm that this will cause to the Southern Resident population of Orcas is UNACCEPTABLE.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Marx	This is completely ludicrous. If anything the Navy should be lessening the impact they have on an already imperiled ecosystem in both the Puget Sound and the Pacific Ocean.	This comment has been duly noted.
Mate	I would like a CD copy of the final EIS. This is a box check on the mail-in form, but not for electronic submissions. I may be good to include this option in later uses of this form. Thank you.	You will be added to the distribution list for the Final EIS/OEIS. Thank you for the recommendation.
Mauser	Dear Sirs, The Navy should be able to do anything and everything it needs to do to enhance the readiness of its fleet and the protection of our country. Environmental issues should not even count when national defense is the issue. Disregard these concerns and go ahead and train wherever and whenever you need to. I live on Hood Canal about two miles north of the floating bridge and you can do whatever you want to do here also. National defense comes first. Environmentalists seem unwilling even to consider the pollution caused by seals and sea lions in our waters, although if they would study the situation as it actually is and inform the public of this we would know for sure what is really doing the damage. Thin the marine mammals	This comment has been duly noted.

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	drastically and the pollution will go down. Also, the salmon population will thrive without these predators to decimate it. Any harm the Navy will do with its training exercises is minor as compared to the harm caused by the excrement these animals pollute our waters with. And the training is essential whereas the rapid proliferation of these creatures should be prevented by any and all means available.	
Maxwell	STOP! STOP!	This comment has been duly noted.
Maya	THE WATERS OF THE GREATER PUGET SOUND AREA ARE DELICATE AND NEED ALL THE PROTECTION THEY CAN GET. NO MORE MILITARY GAMES AND EXERCISES. I HAVE WITNESSED WHAT HIGH POWERED SONAR CAN DO TO ORCAS AND OTHER WHALES AND DOLPHINS. IT'S AWFUL. PLEASE, NO MORE.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Maynard	pleaes do not do any military or other activities on the Pacific Coast. Have you not done enough damage already to the whales and other living things in the Atlantic. Don't you care? Learn some conscience about other living beingsnot just people. Do not do any more harm with your games that damage and destroy. thank you	This comment has been duly noted.
Mayo	I live on the south end of Lopez Island, on Mud Bay. The proposed coverage of the Training Range Complex is not acceptable to me. I think you can do better.	This comment has been duly noted.
Mc Currie	I WAS AGAINST THE CLOSING OF EL TORO MARINE AIR BASE. I FELT SAFER WHEN IT WAS OPEN. I WILL FEEL SAFE ONCE AGAIN WITH YOU OFF OUR WESTERN COAST. THANK-YOU!	This comment has been duly noted.
McCaffrey, C.	I live within site of a Naval Ordinance facility on the Puget Sound. I see submarines and various large naval vessels come into port often. Somehow the Orcas have totally disappeared over time from this area and stay well to the North. However, they have been pushed into a smaller and smaller space and as food supplies dwindle and marine traffic increases they are in a fragile state. Any additional noise or traffic in the area will cause permanent harm. What is the Puget Sound without Orcas?	This comment has been duly noted.
McCaffree, J01	Why were no public hearings held in the Coos Bay / North Bend area? How can the 65,000 people living in our area comment on a draft EIS that we do	The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population

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	along the Southern Oregon Coast? Why are we not being included in this very important public process? We would like these questions and many more answered and would also like to be included in this supposedly "public" process with ample time given in order for us to be able to adequately participate properly	centers in those areas. The Navy was required to make these decisions within the constraints of a limited public notification budget.  Because the vast majority of the Navy's proposed actions would take place in or off the coast of Washington, that is where the Navy placed its emphasis regarding public hearing locations.  The Navy's notification efforts exceeded the requirements of NEPA (40)
	Two weeks with no draft EIS in sight to even look at doesn't cut it.  Thank you,	CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	Jody McCaffree	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
McCaffree, J02	How does one get a hard and electronic copy of your draft EIS? I need both in order to critique properly. Please mail to above address. Also, many people in our area do not have computers. Why have the North Bend or Coos Bay Libraries not been given a copy of your draft. It is still unfair to the 65,000 people that live here that you did not have any public meetings on this in our area. This is clearly a Goal One violation.	An electronic download of the Draft EIS/OEIS has been available on the website since December 29, 2008. As described in the Notice of Public Hearings for this EIS/OEIS, "A paper copy of the Executive Summary or a single CD with the Draft EIS/OEIS will be made available upon written request."
McCaffree, J03	How are we supposed to know or not if you are even receiving our comments made this way? Please e-mail me at [deleted address.] Time for the Navy to come into the 21st century. There is no way this little form is going to cut it in regards to commenting on a 700 page draft. We need to be able to upload our comments with documentation as to what our concerns are. Why should we have to waste a tree when it is totally not necessary? This should be able to be done all electonically. In December I uploaded to the Federal Energy Regulatory Commission (FERC) a 46 page letter with 533 pages of exhibits backing up my letter. God knows I can't believe I am saying this, but maybe FERC could teach you how this can be done.	This comment has been duly noted.
McClain, D.	Is it any differant than a couple of assholes bringing a boom box to a beach or a quite erea other people just want to relax and dont want to hear? Do we not hope and expect they will abide by our wishes and either turn it off or way down where it will; not bother us at all? I mean come on Its there home the orca not our's and we know high frquency sound harms their way of life. Get off your humans are all mighty attitudes and respect them. Do Orca NOT Respect Us?! Never a known case of an atack in history yet they rule their home with iron flukes and could kill us with a snap of our finger. RESPECT its common sense and common courtesy.	This comment has been duly noted.
McClain, P.	The City of Everett recognized the benefits of increased training off the Washington and Oregon in its Community Assessment submitted to the Base Closure and Realignment Commission in January 2005. In its comments the City said, "The military Warning Areas off the coast of Oregon and Washington offer an outstanding location for Battle Group training but have not been fully utilized to date." "Onloading the airwing in Everett and	Thank you for your comment.

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	conducting operations off the Oregon/Washington coast will save approximately eight operating days. This will maximize costly at-sea training, reduce the operating tempo of our Sailors and make for a more rapid response in the events of crisis deployment," the report went on to say. "The availability of offshore training areas and outstanding local training opportunities make Naval Station Everett a prime driver in reducing the cost of battle group trainingOperating locally will increase training effectiveness, reduce costs and improve the quality of life for Sailors and their families." "NSE's Puget Sound location provides access to other military operations for joint training and transformation including other Navy bases as well as Armyand Air Force These facilities, combined with others in British Columbia, Alaska, Oregon and California, provide tremendous capabilities and untapped potential for joint training in any manner of land, air and sea operations including desert, open ocean, littoral, urban and rural. Airspace is open and unencumbered compared to other metropolitan areas, and training areas are almost entirely open. The training possibilities provide an extraordinary depth and breadth of transformation and training possibilities for all threats including force integration and mobilization, Homeland Security, and challenges including traditional, irregular, catastrophic, and disruptive." Naval Station Everett broke ground Feb. 20 on a \$10.2m Fleet Region Readiness Center further demonstrating the Navy's commitment to enhance the quality of life for its Sailors and their families by reducing time-away-fromhome for training purposes without diluting training effectiveness. Sailors currently must travel to San Diego and other cities for training. That's time they could be spending with their families. Improved training options continue to be a priority for the City of Everett officials as they work with the Navy to enhance the quality of life for Sailors and their families. City leaders worked	
McConnell	Please extend the review period for the Navy's plan to expand activities in Puget Sound. The Sound is home to many native species; several bellweather species including orcas and salmon are in decline. Many marine species navigate by sound, and senseless disruption of their environment by explosions will only disrupt the ecosystem further.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Underwater detonations throughout Puget Sound are proposed to significantly decrease as a result of the proposed action. Current and recent level of underwater detonation training in Puget Sound is 60 detonations per year. The Navy's proposal is to reduce training to 4 underwater detonations per year.
McCoy	I am a U.S.Army, combat veteran, recovering from the horrific atrocities of war. I relocated to the remote location of Lopez Island to better myself and recover.  Every sortie or training exercise conducted over and around the San Jaun's, not only disrupts peace and wellbeing, and shakes my home, but also makes me relive times that are better off forgotten.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2,

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	The DOD has other places for aircraft testing / training.	this increase does not correspond to an increase in activities at NAS Whidbey Island.
McDonald	No more weapon testing; stop the plans for weapon testing in CA, WA, OR and elsewhere!	Comment noted.  The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Mcewen	we dont need more spraying in the sky. every few days now the airplanes are crisscrossing our skyles with CHEMTRAILS . NO MORE PLEASE1!!!!	This comment has been duly noted.
Mchugh	to sacrifice the health and well being and quality of the environment for our marine life and human life in this or any area for the purpose of testing weapons is a violation of our human rights it would seem and against nature and any God anyone might believe in if weapons are meant to destroy they should be tested only at the time something is perceived to need destroying because if they're any good they will destroy something wherever they are tested.	This comment has been duly noted.
McKenna	Since it is very difficult to recognize the presence of marine mammels reliably, I am writing to ask you to not test current and new defence systems in NW waters. I do recognize the importance of homeland security, but the development and testing of tools to achieve security need to be very carefully weighed against the risk to our declining and endangered marine mammels. They are at high risk when it comes to loud explosions, loud noices and pollution. My hope is that diplomatic solutions can be successful and other testing options explored.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
McLennan	I am uncomfortable with making a choice between being "protected" against hostile attack/invasion, and protecting the various marine life that may/probably will be impacted by the Navy's training efforts.  I really do not want to make such a choice. But if I actually had to, I guess I would say that I prefer to work for peace than spend large sums of money to placate such paranoia, and not endanger nor be responsible for the demise of those species which make their home in the oceans.  Again, I don't like this choice, and I am unconvinced by the Navy's EIR that I must make the choice in favor of Naval defensive training.  (semi-) Respectfully,	This comment has been duly noted.
Mcleod	We do not need warfare training off the Oregon Coast. Our coast is beautiful and we want to keep it that way.	This comment has been duly noted.
Mcmahon	I want the Navy to protect,not to destroy the Environment.I want sonar actions stoppedOcean life is in peril.No use of depleted uranium.Stop the spread of depleted URANIUM.Alpha particles kill	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of

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	by the close effect. The military killing us by environmental disaster is not a very good way of defending the public!!!	training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
McManus-01	Per your Draft EIS/OEIS, the Navy is planning on expanded testing and explosions in the coastal waters of the Pacific Northwest. I urge you to cancel those plans, not just for whales (Orcas), dolphins, other sea life and the OVERALL HEALTH of the waters, but for the people of the Pacific Northwest. If you are not aware of the problem our oceans are in (90% big fish gone, 1/2 coral reefs gone, depletion of oxygen in large areas of the Pacific Ocean, etc.) take 18 minutes to watch Sylvia Earle (called 'Living Legend' by Library of Congress) plead for awareness of the plight our oceans are in now. ALL life on earth depends on the oceans as their life support system. No blue = no green. You can view this talk plus another by Capt Charles Moore (7 minutes) at TED.org site; http://www.tedprize.org/category/sylvia-earle/	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
McManus-02	THE NAVY AND DOD ARE DISREGARDING THIS CURRENT SCIENTIFIC KNOWLEDGE. YOU ARE ACTING ON ANTIQUATED NOTIONS THAT OCEANS ARE TOO VAST TO HARM AND EVEN IF HARMED IT IS OF NO CONSEQUENCE. ARE YOU WILLING TO KILL THIS VITAL ECOSYSTEM TO 'PROTECT' US? You should change your focus to protecting the seas which will really protect us. Please rethink your assaults on our oceans.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
McManus-03	At least extend your comment period on this matter so knowledgeable people can submit information to you regarding how important it is to PROTECT our seas and just how narrow the focus is of tomorrow's wars. The current economic crisis should be a lesson on how suddenly a seemingly booming system can collapse with devastating long lasting effects when problems are ignored. At least we can live to create a new economic system, but if the seas are destroyed, so will all humanity. Please lift your heads, widen your focus and look at the bigger picture, the reality we live in today not the past. I appreciate all you have done in the past but I also look forward to all the good you can accomplish by exploring and preserving the wealth in our seas. Thank you.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
McNett	We already have enough air activity & noise here on S. Fidalgo Is. and I would hope not to have MORE!When homes are sold in Is. Cty, buyers must be told of WI Navy activities, etc. but no warning is given here in Skagit Cty and we ARE impacted! The Prowlers are so low and loud it seems we will be bombed ourselves at times. The Growlers are no loud they shake our home (and it is SOLID!). Flying is fairly continual now! I would not want to have yet more of it! What about the crash into homes in San Diego last summer?? That could happen here!With the ocean SO close, why note fly due WEST and fly all you want all over the Pacific???	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Meagher	There is no justifiable reason to do defense training off the coast of Oregon	This comment has been duly noted.

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	except perhaps to get money for military contracts! Oregon's coast is known world-wide for its pristine wildlife and environmental beauty and sensitivity. Stay off. Rather, use your technology and men/women for protecting human and all environmental rights from corporate and gov't violations, and encourage diplomacy over military aggression.	
Meany	I was in the Navy in the 1950's, have a high regard for, and liking for the Navy, but wish they would curtail their research and training activities that endanger or harm marine life. Life on this planet is becoming more precarious as a result of man's callous acts towards nature, and military actions are some of the worst and some of the least necessary of these onslaughts against life on this planet.	This comment has been duly noted.
Medovaya	To whom it may concern, The recent US Navy draft EIS is of great concern to many citizens like me. Many areas of California, Oregon, Washington, and Idaho would be contaminated from the US Navy experiments through airborne and water migration across these regions. It also appears that nothing would be spared in testing weapons of war on the public (with the Nevada Test Site and Area 51 available for much of this testing and the Atlantic Ocean also available near Washington, D.C.); it appears that these Western States will be sacrificed for building and testing more weapons of mass destruction. I would urge you to reconsider the plans proposed and stop the expansion of testing sites. Thank you, Mariyam Medovaya	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Mee	Practicing war against any one off the Oregon Coast is not something I would ever want !!! I voted for Obama to end the war, and feel misled by this practice! Please stop this insanity! We have so much solve, and this only seems to be creating more conflict!	This comment has been duly noted.
Meeyer-01	Name: A. D. "Gus" Meyer Organization/Affiliation: Tillamook County Emergency Management Committee Member Address:* 1715 Skyline Drive, Tillamook, OR., 97141-9609 City, State, Zip Code: 97141-9609 Comments: I an writing to support Northwest Training Range Complex Alternative 2. Thanks for coming to Tillamook County with your EIS?OIS Statement presentation. 1. I find it to be in the best economical interests of Americans to have trained and experienced homeland protection resources; especially those newly developed defensive weapons. 2. I accept NOAA Fisheries and US Fish and Wildlife Services participation in Navy's NW Training Range Proposal to be within "Incidental Take" considerations. 3. Your referenced training area mapping shows operations off the Oregon Coast to be twelve miles to sea, well outside Oregon's Territorial Sea Plan. 4. It is my understanding Notices are issued of training operations within the scope of this EIS/OIS.	Thank you for your comment.
Meeyer-02	A. Tillamook County is economically stressed. I ask that you respect our sports and recreational fishery for special seasons for tuna and halibut	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS.

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	fishing.	Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Meeyer-03	B. A word of caution: the fall whale migration is at the eastern edge of your mapped training areas and request your respectful avoidance with these mammals. The spring whale migration is normally much closer to the Oregon Coast, as whale mothers are teaching their babies how to feed on natural resources.	The U.S. Navy has conducted similar training activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy activities, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from training exercises as proposed in the Draft EIS/OEIS.
Meeyer-04	C. OSU Marine Sciences has ocean current monitoring programs (such as Neptune) in the area of your training proposal. Since the Navy has had exercises in these areas for the pas 12 years, I can presume there is mutual awareness of each others' activities. Summary: I support NW Training Range Complex Alternative 2 activities outlined in your EIS?OIS Statement "ANCHORS AWEIGH" Visit www.NWTRangeComplexEIS.com for project information.	To prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training. Without knowledge of all research or monitoring activities that take place, the low level of current and proposed Navy activity off of the Oregon coast has made current Navy practices effective at minimizing interaction with other vessels.
Meister	We live east of Oak Harbor near the Skagit Flats. The planes are loud enough to drown out speech,radio and TV at times (plane pairs and thrusting). I know this exceeds industrial safety limits for hearing protection. The flats are also home to migratory birds protected by international treaties. Your winter flights seem to have increased. I have only called the base once in my 20 years here and that was after midnight. I am concerned that a doubling of flights will affect our quality of life so I hope you take them out over the water where no one lives. Where can we obtain flight pattern and frequency data for review? We appreciate the sound of freedom, but prefer that it not be late at night. Children need their sleep. I read where the new planes would be quieter. Those must be those big ones because those little ones (pairs) are noisier than hell. God bless.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Menashe	conducting bombing practice in a marine sanctuary? that seems like a poorly conceived plan. i strongly suggest that this plan be reviewed. the short-term logistics and economic benefits of testing close to base are of questionable value when compared to the potential health and ecologic costs.	The Navy does not conduct bombing practice within the Olympic Coast National Marine Sanctuary.
Mendola-01	This area is the natural migration path for the gray whales. It is a big ocean can't you go further out?	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is

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		little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Mendola-02	Also we have the earthquake plates right off of the coast in this area. If you are bombing in this area couldn't this cause a real problem? My husband and I have both worked for aerospace industries for years in S. CA. so we know how important what you are doing is, but we are still concerned about what the consequences could be.	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." ( <a href="http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next">http://earthquake.usgs.gov/learning/faq.php?categoryID=12&amp;faqID=88&amp;nextRow=next</a> )
Mention	To Whom it may concern, regarding the Northwest training plan I oppose any expansion of these activities. I believe after listening and reading that there is damage being done to the environment and to the ocean animals. I oppose the expansion as well as any activities that cause deterioration of the natural resource of the ocean ecosystem upon which much of life depends. We should be looking at way to improve the quality of this resource not to cause it's deterioration.  Sincerely, Mark Mention	This comment has been duly noted.
Menzel-01	I whole heartedly agree with the following statement submitted by Kathleen Higgins: This is my protest to the navy and its training activities in the Northwest Training Range Complex, including the north end of Admiralty Inlet and eastern Strait of Juan de Fuca and much of Washington, Oregon and part of California coastlines, including the Olympic National Sanctuary. I completely agree with Orcanetwork.orgs's evaluation of the situation and want to add my voice to their words.	This comment has been duly noted.
Menzel-02	I have read all the explanations and reasoning behind these training activities and I do not agree that adequate measures have been taken to protect and monitor the biological inhabitants of the area. INCLUDING humans and orcas. Explosives and sonar not only endanger and harm wildlife but also human life. Pollution and quality of life included. Two new orcas calf were just born to L and J pod. The whale population is diminishing.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Menzel-03	I see no legitimate justification for these training activities. While I recognize the need for readiness through training, the No Action Alternative is all that I can support due to lack of information available to assess the impact on numerous endangered and declining marine species, especially with proposed testing of new systems. Personally I can't see why it needs to done at all. Or why it needs to be done in such a sensitive area? The challenge is to halt the need for these training exercises altogether, which is a problem of international relations and diplomacy. President Obama and Sec. Clinton can prevent this particular travesty by ending US government complicity in global corporate criminality, thus fostering improved international communications. It can't be that hard.Diplomacy begins at home.	This comment has been duly noted.
Meyer-01	I urge the U.S. Navy to stop needlessly injuring and killing whales with mid- frequency sonar during routine training exercises. A growing body of scientific	Appendix E of the Draft EIS/OEIS provided a complete analysis of the

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	evidence called "overwhelming" by the Scientific Committee of the International Whaling Commission points to high-intensity sonar as a cause of mass strandings and whale die-offs around the world. Whales should not have to die for the sake of military training.	relationship between sonar and marine mammal strandings.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Meyer-02	Please immediately adopt common-sense measures to keep whales safe. These include identifying low-risk areas for routine training; consistently establishing appropriate safety zones around ships transmitting sonar; and reducing the source level of sonar signals at nighttime and in other periods of low visibility.	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Some restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Meyer-03	I call on the Navy to obey our environmental laws and safeguard marine mammals in the course of routine training. That the Navy has been conducting training exercises all along without the public's knowledge is unacceptable. Your plans to expand these operations using dummy minefield avoidance training, hundreds of training flights and warfare simulations over both land and sea as well as increased use of sonar is a potential threat not only to endangered whales but also to other marine mammals, fish, and ocean going birds.	The Navy is in complete compliance with the National Environmental Policy Act (NEPA).  The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Milholland-01	I support the "no action alternative" (maintaining existing training levels) in regards to the expansions planned by the Navy for its Northwest Training Range Complex.	This comment has been duly noted.
Milholland-02	According to the Oregonian article Navy plan to increase warfare training off Oregon coast draws objections by Scott Learn & Lori Tobias "The biggest environmental concern is the Navy's use of midfrequency active sonar, which would increase under the plan. Sonar use damages whales and other marine mammals that use sound to communicate and navigate. The training area includes waters used by nine marine mammal species listed as threatened or endangered including seven whales. Of particular concern are Puget Sound's southern resident killer whales, whose population has dwindled to about 70.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Milholland-03	In its review, the Navy said sonar exposure contributed to five "mass stranding events" worldwide since 1996, with whales showing up dead in numbers on the beach.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Milholland-04	The review says the increased training would boost potentially harmful mammal sonar exposures from about 110,000 a year to nearly 130,000.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine

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		Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS
Milholland-05	The Navy has rejected the idea of seasonal shutdowns or avoiding key habitat areas." As important as training is to the Navy, I support the No Action Alternative due to the proposed testing of new weapon systems and the lack of information available to assess the impact on numerous endangered and declining marine species.	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Some restrictions on Navy sonar use have been considered by the Navy, but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Miller, M.J.	Please stop all sonar and bombing of our Mother Earth. Our oceans give life to all of us. To survive we must protect these waters and animals from pollution and violence.  How do you want YOUR GRANDCHILDREN to remember you? As a person who killed all the buffalos, as a person who turned the whales brains into mush? Or do you want to be remembered as a person who loved their Mother and protected HER.	This comment has been duly noted.
Miller, Marion	I am opposed to the extension of the training range including the risk of exposure of toxic chemicals to human animal floral and aquatic life of the pacific northwest coast. I will do everything in my power to oppose the threat to all life forms incurred by the procedures proposed by the Naval operations on our coast.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Miller, Rhea	Please take the "no action" alternative. The overflights from NAS Whidbey disrupt classrooms and simple conversations. We feel like we ourselves are under attack on Lopez Island. Please do not expand training at NAS Whidbey. Already people's nerves are on edge from these overflights. Thank you. Rhea Y. Miller	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Miller, Robert	I have watched everyday while your high-fiting planes spew their toxic contents into every living thing on the face of the planet.  Words fail to describe the monsters you are. You just can't seem to let the eco system rebuild itself. You are intent on detroying every living thing on the planet. Ah, but I am peace knowing that there is one who comes for those who destroy His creation. You will find His name in the Book of Revelation 19,v11.	This comment has been duly noted.
Milner-01	Glen Milner March 10, 2009 Naval Facilities Engineering Command Northwest ATTN: Mrs. Kimberly Kler—NWTRC EIS 1101 Tautog Circle Suite 203 Silverdale, WA 98315-1101 VIA E-MAIL: http://www.nwtrangecomplexeis.com/NtrcCommentForm.aspx Mrs. Kimberly	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

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	Kler I am commenting on the Navy's proposed action for the Navy's Northwest Training Range Complex. I live in Lake Forest Park, Washington. I am 57 years old and have lived in the Puget Sound region my entire life. I frequently visit areas near the proposed range extensions. I am opposed to the Navy's proposed use of water areas in Puget Sound and off the shores of Washington, Oregon and California. I attended the public scoping meeting in Oak Harbor on September 10, 2007.	
Milner-02	The National Environmental Policy Act (NEPA) of 1969 requires federal agencies to examine the individual and cumulative, or additive environmental effects of their activities. An Environmental Impact Statement (EIS) is a detailed public document that provides an assessment of the potential effects a Federal action might have on the human, natural, or cultural environment. I have reviewed the EIS, volumes 1 and 2, for the Northwest Training Range Complex. The Navy's EIS does not clearly state what the Navy intends to do in the Northwest Training Range Complex. For example, I believe many more rounds of the 20mm CIWS will be fired than are listed in the EIS. It is unclear how the number was determined.	The Navy is in complete compliance with the National Environmental Policy Act (NEPA).  The activities for each alternative are described in Chapter 2 of the Draft EIS/OEIS.  The proposed levels of training, including rounds fired, was based on historic use and on Navy projected training.
Milner-03	Also, if depleted uranium rounds are expected to be phased out by 2008, why has this not been determined? Have depleted uranium rounds been phased out?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Milner-04	Will other agencies be using the Navy's Northwest Training Range Complex? Will the U.S. Coast Guard, Canadian forces, and other agencies be involved in activities? If so, what are the activities of these agencies? The Coast Guard often conducts live firing exercises. The activity of other agencies in the Navy's Northwest Training Range Complex should be included in this EIS. They will be using the training range under the guidance of the U.S. Navy.	Canadian and Coast Guard activities are not covered in this EIS/OEIS. Their use of the ocean in international waters does not fall under the control of the U.S. Navy.
Milner-05	The basic function of the Navy is to increase the warfighting ability of the U.S. military at all costs. Environmental protection is seen as a constraint by the Navy instead of an issue the Navy willingly studies and addresses. The Pentagon has often stated that environmental protection is a hindrance to military activities. This environmental assessment is being conducted because the Navy is afraid of losing the ranges it now utilizes. Why should the Navy now be trusted to be environmentally sensitive to these areas? The Navy is conducting the Northwest Training Range Complex EIS/OEIS to plan for the future and to assess the effects of the Navy's ongoing and anticipated operations on the environment. What are these ongoing and anticipated operations? The Navy must provide much more information. The Navy must clearly explain the activities involved in the range areas and explain the effects of these activities on the environment. The Navy has failed to present	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. It is not accurate to describe that the Navy trains "at all costs." In fact, the Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.

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	adequate information. Thank you for your consideration. Glen Milner	
Mindt	Please do a service to your country and allow the citizens who you are here to protect, be allowed ample time to review ALL of the data they require to determine if this expansion is in THEIR best interests.  Regards	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Mish	I would ask that you kindly not escalate practice warfare off Oregon's coast.	This comment has been duly noted.
Mitro	As a West Coast resident I want to express my discomfort with weapons testing and training plans along the west coast from California to Canada. I know that training has to happen, but do not feel it should be along the seismically active and ecologically fragile zone of the west coast. Thank you for listening. Eileen Mitro	This comment has been duly noted.
Mocniak	I'm writing inn response to your comment request for the possible expansion of the NW training range complex. In short, I have witnessed the impact of the Navy's exercises on human and non-human communities in my region, and understand it to be disruptive in the least, devastating to marine life in the extreme cases. The first 30 seconds of propaganda video shown on the NW training range website should say it all. As a highly populated area with fragile ecosystems, this is no place for extensive Navy training. Take it somewhere else, or downsize your training efforts - perhaps retool towards something positive, such as invasive species removal, or habitat restoration - instead of harmful sonar testing and other such activities.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Moghe	Do not kill any marine mammals in warfare test programs!	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Moller-01	MARCH 10, 2009 The Navy testing on the North Coast of their 'new weapons systems' is not a good idea nor does it show good judgment. In this period of history, at this time, the United States of America must set an example of intelligent thinking. The entire Earth has both ECONOMIC and an ENVIRONMENTAL CRISIS AT HAND. Conducting 'new weapons testing' in the ocean is not a good decision nor does it show good judgment. OCEAN TEMPERATURES MUST NOT INCREASE. THAT IS A FACT. The Pacific North West is a wealth of NUTRITION for the ENTIRE PACIFIC OCEAN. Phytoplankton, which is in the ocean and cannot be seen with the naked eye, is present. The chlorophyll in the phytoplankton produce the shades of green seen in all waters. The Pacific North West is a rich source of phytoplankton. Phytoplankton obtains energy through photosynthesis and must therefore live in the well-lit surface layer known as the euphonic zone of an ocean. Phytoplankton is responsible for much of the oxygen present in the Earth's	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.

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	atmosphere, according to science, and phytoplankton sequestrates C02, and IS of MAJOR IMPORTANCE in LIFES CYCLE.	
Moller-02	Electromagnetic wave testing and advanced sonar are great weapons and communication devices, and location detectors, BUT they are going to change the ocean, KILL FISH AND WHALES, the populous will be displaced, the economic structure will become weaker outlook will be poor; and the weapons testing here in the Pacific Northwest is ENTIRELY WRONG. The list of environmental consequences as a result of increasing human impact is endless. THE REALITY OF GREED IS EXTINCTION. Mother Nature has given us opportunities to improve life through technology, and our system was working. Our system was working because there is a flow of profit, flow is important. PROFIT is not necessarily a bad thing either, when used wisely. When humans begin to use greed in their use of technology, the abuse and exploitation of the use of technology shows a flagrant disregard for other humans, the environment, and for life itself. Because of this exploitation, EXTINCTION IS A REALITY, and is LOOMING with a COBRA like head shadowing the entire EARTH.	The Navy is not proposing any electromagnetic wave testing.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Moller-03	I would STRONGLY ENCOURAGE the Navy to extend the comment period on new weapons, AND RECONSIDER their quest to test 'new weapons' in the Northwest Training Range Complex. Expanding operations in the Pacific Northwest is not a SOUND IDEA OR GOOD JUDGMENT. An extended comment period would further the Navy's knowledge regarding ecological impact of their 'new weapon systems' on Washington, Oregon, and Northern California to the San Francisco Bay and east to Idaho, which also brings in the state of Nevada. THE IMPACT ON THE POPULOUS OF THESE REGIONS MUST BE TRULY UNDERSTOOD BY THE NAVY.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Moller-04	THE NAVY NEEDS TO UNDERSTAND THAT THEIR MITIGATION EFFORTS IN THIS CASE ARE NOT SOUND NOR ARE THEY CORRECT IN MANY AREAS. The Navy must realize that Questions as to the economic as well as environmental results of their testing have been raised, many unanswered and some answered with negative impact. This negative impact strongly suggests a true lack of concern. This negative impact IS and WILL jeopardize an affective economic recovery for this country through DISPLACEMENT OF THE POPULOUS, the ACTUAL 'TESTS', AND TESTING PROCEDURES, AND THE AFFECTS OF THOSE TESTS. At this time, ECONOMIC INSTABILITY AND TURBULENCE, at GLOBAL proportion, AND THE SAVING OF MOTHER NATURE MUST BE ADDRESSED, BECAUSE THE EARTH IS AT A POINT OF NO RETURN AND THE NAVY AND AIR FORCE USE OF THE HAARP TECHNOLOGY IS ONE OF THE PROBLEMS AND IS NOT THE SOLUTION, AND MUST NOT BE DEVELOPED AT ANY LEVEL. Respectfully submitted, Barbara J. Moller cc. Senators: Barbara Boxer, Dianne Fienstein, Harry Reid. Congressman Mike Thompson. MARCH 10, 2009	The NWTRC EIS/OEIS complies with all applicable environmental laws, including NEPA and its requirements. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any unavoidable impacts of the proposed action.
Monma-01	1) I just came from a day of talks about the state of the Puget Sound.	As described in the Draft EIS/OEIS, the Navy complies with the National

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	According to BeachWatchers, Washington State University extension, and Puget Sound Partners, our marine life is already very fragile. So what is the purpose of this Navy training, if during the training you destroy the area you are meant to protect? In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	Marine Sanctuaries Act (described on p. 6-3). This act regulates permitted activities within the Olympic Coast National Marine Sanctuary.
Monma-02	2) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Monma-03	3) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the
Monma-04	Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat.	National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Monma-05	5) The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
	It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.  To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The

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		taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Monma-06	6) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Monma-07	7) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
	review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Monma-08	8) Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Monma-09	9) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Monma-10	10) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Monma-11	11) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In short the Navy should not be polluting our Sound waters!	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire

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		during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Monson-01	1) I support the "No Action Alternative" (maintaining existing levels of training activities) because of the proven adverse impacts of the expanded activities.	This is a decision that will be made by the Secretary of the Navy upon conclusion of the NEPA process for the NWTRC. This decision will take into account all factors from Navy training to environmental concerns.
Monson-02	2) Sonar can have detrimental effects on the ears of Orcas and other marine mammals, resulting in disorientation and sometimes beaching. The loss of hearing for a whale or dolphin almost certainly leads to death. There are undoubtedly long-term effects as well. This plan impacts not only our immediate environment, but extends south to Oregon and California. Please reconsider this plan!	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is

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		little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
		The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
Moore, A.	What are you thinking? How could this possibly be of benefit to this planet and humanity? Is there not enough suffering and inhumanity, that this government has to inflict more on the other lifeforms?	This comment has been duly noted.
Moore, M.	I am deeply disturbed by you plans to expand training activities in the Northwest Training Range. I'm recommending "No Action Alternative". Your present plans for whate protection are woefully inadequate. Include experienced while biologists to improve mitigation at least. Margaret Moore	This comment is duly noted. The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Moore, S.	I am deeply concerned about the munitions testing reported in the Examiner that is planned to occur on the West side of Whidbey. I have heard how dangerous to health Depleted uranium is and can only imagine the horror of what sonar munitions would do to the marine life. Our area is much too populated with people and whales and sea life for this kind of testing. It would be irresponsible to attempt it. PLEASE DON'T!!!	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Moors	USAF has been dumping barium and aluminum into our atmosphere by the billions of tons since the late 90's while our cowardly politicians on both sides of the isle play "see no evil, hear no evil." Only Kuchinich had the balls to address this greatest environmental disaster in history (HR 2977) We Americans truly deserve the caliber of "leaders" we have because as a collective we are truly too stupid and lazy to respond even to situations which signal our own demise.	This comment has been duly noted.
Mooshie	Keep your military spook [expletive deleted] out of our coastal waters!	This comment has been duly noted.
Morgan	As a retired disabled veteran and one that has finally made it to the coast of Oregon thinking since the state took my hound hunting away I'd turn to Fishing and now the Navy wants to take that away. Personally I beleive the Navy has enough of the ocean to mess around instead of our back yard.	This comment has been duly noted.
Morris	It is unconscionable in the 21st century for the Navy to think that it has the right against monumental public outcry to continue to seriously endanger many cetacean species inhabiting the world's oceans. The Navy has no right to harass, injure, or kill thousands of whales and dolphins along the Oregon Coast and other critical places in the world's oceans.  Mid-frequency active sonar without essential safeguards — is known to	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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	cause disorientation, hearing loss, stranding and death in whales and dolphins.  The Oregon coast should be and is in many places a marine sanctuary, including migratory routes for the gray whale. Whale watching, fishing are active industries on the Oregon coast and should have priority over the Navy's need to practice sonar at the risk of destroying these industries and disrupting irreparably the migratory routes of cetacean species such as the gray whale.  The Navy does NOT need to put marine mammals at risk in order to protect the American people. The horrific attack on the World Trade Center on 9/11/01 only shows that trying to just rely on high tech means for protection leaves us all very unprotected. The Navy can take common sense precautions, such as avoiding whale calving grounds, migration corridors, and critical habitat;  thus safeguarding all cetacean species along the Oregon Coast and elsewhere now and in the future.	impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Morrison	Please do not do the testing in the Washington & Oregon waters. We need to be healing our water & sealife & not creating more destruction.	Comment noted.
Morse-01	Dear Sirs/Madams, It has come to my attention that the Whidbey Island Naval Station of Washington State intends on more than doubling its launches and landings as well as changing the training planes from Prowlers to Growlers. I am concerned about noise, air pollution and public safety even if these planes are not armed during practice launches. Is this increased training necessary at this time? Do we really need to replace Prowlers with Growlers? How would this increase affect the important wildlife resource of this area (San Juan Islands and West Coast generally)? How does it affect human beings physiologically? Please consider your decisions more fully. Sincerely, James Morse	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Morse-02	Dear Sirs/Madams, It has come to my attention that the Whidbey Island Naval Station of Washington State intends on more than doubling its launches and landings as well as changing the training planes from Prowlers to Growlers. I am concerned about noise, air pollution and public safety if these planes are armed during practice launches. Is this increased training necessary at this time? Do we really need to replace Prowlers with Growlers? How would this increase affect the important wildlife resource of this area (San Juan Islands and West Coast generally)? How does it affect human beings physiologically? Please consider these issues more fully. Sincerely, Katherine Gantz Morse	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Morton	I am very concerned about the environmental issues which have not yet been considered with the intention of the training scheduled to take place in our neighboring oceans, etc. Please, let us look at what this may do for the future of our sea life which is always our alarm system for our own future health in local and world wide environment. The earth is in peril! Thank you.	This comment has been duly noted.

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Motko	Do follow through on your plans to continue using/expanding the training areas around Whidbey Island and the San Juan Islands. Any environmental impact would be minimal compared to the devastation that could result to our country should our fighting men and women not be trained to be the best they can be.	This comment is duly noted. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
	Thank you!	
Mount, W.	The contamination of Air, Water and land within the 3 western states by the United States is a violation of both USA and international laws. In order to do this one must immediately evacuate all United States of America citizens and Foreign Dignitaries from the affected areas. To do other wise is a Declaration of War against 231 other nations and a violation of US Code. DO whatever you wish, you have the power, but a Declaration of War is a very serious event to 231 other nations. I will be contacting other Ambassadors and their Consulates about this matter. Thank you for your time. The Honorable Grace Dr William B. Mount Knight of Malta Captain (Ret) USA Ordained Minister 253-686-6290	This comment has been duly noted.
Mount, B01	1) I am writing to you as a very concerned citizen who has a home on the coast of Oregon. I am concerned that the Navy plans to use both mid-frequency and high frequency sonar in the coastal waters; these have a history of injury to marine mammals. In litigation in California against the Navy, the Navy itself has estimated that its California sonar drills would disturb or injure 170,000 marine mammals and cause permanent injury and possible death to more than 450 whales, as well as temporary impairment in at least 8000 others. What does the Navy estimate for injury in Oregon waters?	1) In regard to SONAR concerns, the U.S. Navy has conducted midfrequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its effects.
Mount, B02	2) Apparently there isn't a 12-mile offshore limit to the Navy's proposal. In fact, one of the Navy personnel said that if they need to do shallow water training, their proposal allows them to do it. This will deal another blow to the commercial fisherman here in Brookings vastly decrease the whale-watching dollars and profoundly disturb the rural life we have chosen here in Brookings.	No sonar is performed within 12nm of the coast and there is no training sonar used within the Puget Sound.
Mount, B03	3) I have reviewed some of the Navy's DEIS/OEIS WWW.NWTRangeComplexEIS.com Their plans for the Oregon coast are quite alarming. I believe that the Navy needs to rethink and abandon large parts of this entire proposal. The potential effects of new and increased military activity off the coast of Oregon could result in a general degradation of the natural environment, be fatal to wildlife and detrimental to the human quality of life. And contrary to the best interests of the tourism industry and	This comment has been duly noted.

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	coastal property values.	
Mount, B04	4)I am asking you to hold additional public hearings in Oregon with at least two weeks notice in papers, radio stations, and TV both in Portland, cities in the Willamette valley, and the coastal towns.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.  Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts. As described above, the potential impacts of the proposed action of this study are deemed to be minimal in Skagit County.
Mount, B05	5) Publish details laymen can understand on the 12-mile offshore limit, statistics on the negative effects on tourism, the fishing industry, mammal deaths. Please consider my requests and allow the local population to influence the outcome of the Navy's plans. WE are the ones who will live with all the possible negative consequences. And unfortunately, many marine mammals may be gone. Kind regards, Brian Mount	This comment has been duly noted.
Muchowski	Do not continue with your plan to use our North Coast as a battleground. The rich sealife combined with upwellings of significant magnitude make this a unique area to be preserved and protected. Practice somewhere else.	This comment has been duly noted.
Muhs	As a homeowner, on the pristine Humboldt County coast, I am opposed to sonar operations, on and off shore, here and along the Mendocino Coutnty coast. I don't want to hear, see nor witness the destruction of our forests and seas, habitat to many species of wildlife and home to my family, friends and community. Already the coastal waters, as well as the local rivers, are protected to preserve the many endangered fish species. I am familiar with the money, time and efforts being spent to clean-up and make safe, for renewed public access, the Southern California coastal training dunes. I vote protect our California coast. Respectfully, concerned citizen.	This comment has been duly noted.
Mullane	Oregon's Department of Environmental Quality (DEQ) is interested in the Northwest Training Range Complex Draft EIS/OEIS, which proposes training increases at Northwest Training Range Complex (NWTRC) Study Area. Proposed activities in areas W-570, W-93A and W-93B of the PACNW OPAREA are of interest to DEQ, even though this area is outside the 12 nautical mile line. The proposed alternative will increase the use of hazardous materials which can easily transport through the water column, the food web, and across political boundaries.	A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in

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	DEQ is concerned about any proposed increase in discharge of toxic pollutants into the environment, particularly those that are persistent or bioaccumulative. DEQ is concerned about the potential for increased body burden of toxic substances in fish, and is currently revising its water quality standards to incorporate new information about quantities of fish consumed by Oregonians. Additionally, DEQ is developing a prioritized list of persistent pollutants for surface water that will be completed by June 2009.  Pollutants such as heavy metals and polycyclic aromatic hydrocarbons (PAHs) are hazardous to human health and aquatic life at relatively small doses. Regardless of selected alternative, the Navy should continue to manage hazardous materials in compliance with applicable federal and state regulations, and Department of Defense guidelines.  Signed,  Neil Mullane  Division Administrator, DEQ Water Quality Division	the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.  As part of the Endangered Species Act and Marine Mammal Protection Act permitting processes the National Marine Fisheries Service (NMFS) conducted an independent review of the Navy's actions. The Navy's mitigation measures have been reviewed by the NMFS and deemed acceptable.
Mullen	Dear U.S. Navy Personnel:  I am writing to you today to request that you immediately stop your warfare testing expansion in the Pacific Ocean, Idaho, Washington, Oregon, and California, and the "taking" of marine mammals. Any type of warfare testing is not conducive to the well-being of this planet and its inhabitants. As you are very well aware of, the destruction of any marine life interferes with the entire eco-system.  It is very disturbing that we have individuals in the U.S. Navy who do not utilize their common sense, compassion and understanding. Instead, their primary focus is on destroying, due to severe cases of indoctrination.  As an alternative to training your personnel to obliterate the planet, you could be teaching them to preserve the beauty of it. I realize that what I suggest is a long shot, but perhaps someday some of you will wake up and see the damage you have done.  Sincerely,  Ann Mullen  A very concerned citizen	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either A or B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected.
Muller	Per your Draft EIS/OEIS, the Navy is planning on expanded testing and explosions in the coastal waters of the Pacific Northwest. This will be a horrific problem for whales (Orcas), dolphins, other sea life and the OVERALL HEALTH of the waters. If you are not aware of the problem our oceans are in (90% big fish gone, 1/2 coral reefs gone, depletion of oxygen in large areas of the Pacific Ocean, etc.) take 18 minutes to watch Sylvia Earle (called 'Living Legend' by Library of Congress) plead for awareness of the plight our (once thought of as too vast to harm) oceans are in now. ALL life on earth depends on the oceans as their life support system. No blue = no green. You can view this talk plus another by Capt Charles Moore (7 minutes) at TED.org site; http://www.tedprize.org/category/sylvia-earle/ THE NAVY AND DOD ARE DISREGARDING THIS CURRENT SCIENTIFIC	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The

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	KNOWLEDGE. YOU ARE ACTING ON ANTIQUATED NOTIONS THAT OCEANS ARE TOO VAST TO HARM AND EVEN IF HARMED IT IS OF NO CONSEQUENCE. ARE YOU REALLY WILLING TO KILL OUR LIFE SUPPORT SYSTEM TO 'PROTECT' US. You should change your focus to protecting the seas which will really protect us and your jobs. Please rethink your assualts on our oceans and help us to evolve in an intelligent sustainable manner. At least extend your comment period on this matter so knowledgeable people can submit information to you regarding how important it is to PROTECT our seas and just how narrow the focus is of tomorrow's wars. Without healthy ocean systems, whatever life remains on Earth will be too busy surviving to carry out modern warfare. Which, by the way, means you will loose your Navy jobs. The current economic crisis should be a lesson on how suddenly a seemingly booming system can collapse with devastating long lasting effects when problems are ignored. At least we can live to create a new economic system, if the seas are destroyed so will all humanity. Yes, it is that serious. Please lift your heads, widen your focus and thinking to look at the bigger picture, the reality we live in today not the past. Appreciating all you have done in the past but looking forward to all the good you can accomplish by exploring and preserving the wealth in our seas. Thank you.	broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.  The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.  This comment has been duly noted.
Murphy	I am very concerned about the impacts of siting this Range Complex in the Strait of Juan de Fuca and Puget Sound. I believe it will have a devastating effect on our resident killer whales who are already considered to be stressed and have been recently listed as a federal endanfered species. There is now documentation that the current noise levels in the Straits and Sound are effecting orca communication, requiring them to vocalize at a louder level. An additional concern is the impacts on species using the complex of National Wildlife Refuges located in the Sound & Straits. Approximately 70 percent of the nesting seabird population of Puget Sound and the Strait of Juan de Fuca nest on Protection Island, located at the confluence of Puget Sound and the Strait of Juan de Fuca. This population includes one of the largest nesting colonies of rhinoceros auklets in the world and the largest nesting colony of glaucous-winged gulls in Washington. The island contains one of the last 2 nesting colonies of tufted puffins in the Puget Sound area. Some of these bird populations are experienceing their lowest numbers since the Refuge System was established. These are just a few of my concerns. If this project is to move forward there must be a full and fair environmental impacts assessment. Thank you for this opporutnity to comment. Anne Murphy	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below: 3.9 Marine Mammals 3.10 Birds
Myhr-01	Dear Sir/Madam: There has been practically no notice of this EIS locally. I urgently request that you extend the time period for comments beyond Feb 18, 2009. Only today did I learn of this planned expansion which may double the flights over Lopez and San Juan Islands.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and

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		population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.
Myhr-02	There has long been a serious concern about the flight patterns at Whidbey NAS that affect the noise level in our communities. I feel strongly that you need your top leadership to come forward to the islands and meet with community leaders and members to explain your programs and plans that affect our lives substantially. Feel free to call me at my home phone at any time: 360-468-2258 or leave a message at the council offices at 360-370-7475.  Sincerely Bob Myhr, Council Member, District 6 San Juan County Council	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island. Flights over the San Juan Islands will not increase as a result of the proposed action.
Nachlinger	I am in favor of allowing the increased presents of Navy activity on several counts.  1) With the increased saber rattling from Korea and China, their claim to be able to reach our West Coast should not be taken lightly.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
	2) Economically an increase of personnel and activity will indirectly stimulate the local economy. The Pacific Northwest has a history of support for the military and its facilities.	
	3) The weather patterns over Whidbey make it one of the better facilities in the Pacific Northwest for training, more clear days equates to more available training hours.	
	4) Who was here first? If you moved into the area after the base became active, you had knowledge of the activity and you agreed to that "problem" when you signed your purchase agreement. I personally enjoy watching the aircraft, and don't believe all of the trumped up environmental issues people put forth as opposition to being able to defend our Nation or stifle the military presents. I also don't think the spotted owl or eagles existence takes precedence over our own existence.	
Nadeau	It is vital to extend the comment period on this project. We need accurate and complete lists of the chemicals involved and the hazards associated with their use, individually and in combination. We need to NOT endanger our food supply, marine and other, and NOT to endanger intelligent marine mammals	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	like whales by ecological unbalancing and the torture of underwater noise. The impacts of such a project are unimaginably large and potentially devastating. Not to mention expensive financially. Fund peace, not war. And extend the comment period significantly so that accurate information can be disseminated and evaluated.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The Navy believes the cumulative impact analysis in the Draft EIS/OEIS is very thorough, and meets the Council on Environmental Quality's guidelines.
DUDI IC DA DEICID		Please refer to the following sections of the Draft EIS/OEIS for the

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		environmental impacts on the resources listed below. Section 3.3 Hazardous Materaials Section 3.9 Marine Mammals Section 3.16 Public Safety
Nafziger-01	Since the US Navy is no longer involved in defense of this country, but instead is part of an empire building military, I would prefer to see all training in the US and its ajacent waters stopped. The military budget should be cut to one tenth of what it is and then the military reorganized to reflect a defensive roll. I dislike the Navy's disregard for marine life and its careless use of U238 munitions near our coast. The use of U238 munitions would be classified as a war crime in a civilized world, so their use in our waters is unconsionable.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.  Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed
Nafziger-02	Whale killing sonar should also be prohibited. Even our "defense" is not worth that price.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.

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Nakahama	To Whom this may concern:  I believe the intentions of the Navy and related military services are serving our best interest in many ways, and it there is no doubt in my mind that we require a strong evolving, military to maintain an effective defense force, but I must say I strongly disagree with this development happening off a coast that has already been subjected to overfishing and is suffering from the effects of global warming, shifting ocean currents, and man's continued onerous presence that has effectively reduced the oceans capacity to heal and renew itself.  California has objected to the Navy's testing off their coast for similar reasons and I am of the opinion that we are of the same mind and determination. There can be no middle ground when it comes to how we treat our ocean and it's inhabitants. For all it's good intentions, the Navy will do harm, and it will be a sad day again, that we once again subject, this fragile environment to our reckless treatment.  Please consider alternatives and recognize the fragile creatures you affect with your sonar, bombing, and echo location testing. Our local economy relies on ahealthy ocean, and our circumstances are even more dire because of the harmful, almost irreparable damage caused by worldwide global changes. At what price will we continue to treat our environment badly? Will it be worth it in the end to have one more advanced sub at huge cost to us morally and economically?  Thank you, and continue your efforts in a responsible manner that recognizes our new environmental conditions, and the lifeforms affected, including ours. Respectfully, Yves	The Navy shares your concerns with the oceans, and its resources. The Navy in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.  The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.
Nakano	I am very concerned about the effects of the Navy's sonar and testing activities affecting the Marine Sanctuary off WAshington State shores. The safety and protection of the Marine mammals in our waters is far more important than the harmful, destructive and violent activities of the Navy's testing activities.  Sincerely, Nancy Nakano	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Neff, H.	NO and jusy how crazy are you to think this is a good idea?	This comment has been duly noted.
Neff, D01	YOU MUST NOT INCREASE FLIGHTS OVER SAN JUAN ISLANDS. THE ALREADY FRAGILE ECOSYSTEM AND ECONOMY OF OUR ISLANDS CANNOT BEAR THIS. THE HIGH DECIBEL LEVEL WILL DESTROY THE VALUE OF OUR HOMES AND THE PEACE AND QUIET THAT WE HAVE WORKED SO HARD TO MAINTAIN. GO VIRTUAL!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Neff, D02	PLEASE DO NOT DO THIS TO OUR CHILDREN WHOSE WELL BEING	With respect to public health and safety issues, the Navy complies with all

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	AND HEALTH NOT TO MENTION ECONOMIC FUTURES COULD BE DAMAGED. WHAT OF THE ORCAS, AN ENDANGERED SPECIES, WHO WILL ALSO SUFFER FROM HIGH DECIBEL LEVEL? AND IF THERE ARE CHEMICALS INVOLVED AS IS RUMORED, GOD HELP YOU.	best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Nelson, D.&R.	We are very much opposed to the U.S. Navy expanding its weapons testing at Indian Island in Washington State. The site is extremely close to Port Townsend, Port Hadlock and Marrowstone Island and would threaten local settlements and populations.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Nelson, G.	I Say NO ABSOLUTELY NO,to the expansion of the NW United States Naval exercises that put in jeapardy human, animal, sealife, water resources and plantlife. On general pinciples I say no to all aerial chaff, metals, and other unknown pathogens in our skies, which affect our soil, water and the air we breath. Gail H. Nelson, Ph.D. Stepdaughter, Lt. General John Norton, US Army retired. Grandaughter, Finney Bascom Smith, US Royal Navy, WWI Daughter, Dr. George Hall Hogeboom, Biological Weapons, Dugway Proving Ground, FL, WWII, deceased.	This comment has been duly noted.  Effects of past, present and planned Navy activities have been discussed in Chapter 4; Cumulative Impacts.  The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Nelson, J.	I am registering my complete opposition to the Navy's possible expansion of military activities on the Pacific Coast. This is an unnecessary expenditure and has environmental and economic consequences that will adversely affect the west coast. We do not need to increase the already bottomless pit of military spending! Thank you.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062.
Nelson, M.	The Navy NWTRC expansion being contemplated would pose significant risks to Whales, fish and other wildlife, that depend on sound for breeding, feeding, navigating and survival in general. In addition there are 10 Important Bird Area's within the area of the NWTRC. The Navy has made judgements that birds and other animals will not be significantly impacted by increased activities but not provided information about the activities, as is required by NEPA. In addition, the Olympic Coast National Marine Sanctuary is not recognized for its importance nor is the history of incompatibility between increased naval exercises and environmental groups and local residents, due to the unique characteristics and species found there, been addressed. This whole area should be excluded from the Navys' plans! This is not a comprehensive, detailed environmental DEIS. The Biological Assessment referred to in the text is missing. An evaluation of effects on fish and fisheries	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.  The Navy continues to conduct activities that the Olympic Coast National Marine Sanctuary has found to be compatible with Sanctuary goals.  Concerning the comment regarding segmenting, the two actions, although overlapping, involve very different activities, Fleet training on the NWTRC and RDT&E on the NAVSEA NUWC Keyport Range Complex, respectively. Neither action depends on the other. The Navy is ensuring

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	is lacking also This should invalidate the DEIS or delay it at any event. In addition, NEPA prohibits segmenting of linked projects in different analyses (NWTRS and NAVSEA NVWC). Another area which impacts me personally and of which there is no mention in the DEIS, is training exercises over land. I am referring specifically to jets flying at tree or surface level over Lake Kachess and environs. I live near the lake and during the summer at least several flights a day, sometimes more, fly just over the tree tops at my house, about a half a mile from the lake. The noise is incredibly loud. My neighbor with a tower like house which goes up above tree height can actually see and make visual eye contact from his kitchen with the pilots! People with homes on the lake and out in boats see the planes come just over the surface of the water and fly to the end of the lake. As more people move into the area, more will be impacted. How many more flights will we be seeing? I feel the DEIS should be redone to correct these failures and address all critical areas.	NEPA and EO 12114 compliance for both actions. NUWC Keyport's activities are evaluated in the Cumulative Impacts section of this EIS/OEIS, and NWTRC activities are included in the Cumulative Impacts section of the NAVSEA NUWC Keyport Range Complex Extension EIS/OEIS.
Nelson, R.	I am very concerned about the Navy's plans for our offshore areas. The pride of the Oregon Coast is the gray whale migration that takes place off the coast, and the resident whales that remain here to feed, especially in the summer. It is well established that sonar injures and kills whales. There are other concerns, as well, some having to do with our fishing industry. I know national defense is important, but so is what we are trying to defend, including our natural treasures.	It must be acknowledged that ASW activities have been conducted without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC over the last several decades. Given the natural variation of marine mammal location over time withinthe NWTRC, operational variability of Navy ASW operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.
Nesser-01	I am in favor of the No Action Alternative in the Northwest Testing Range Compexies Draft EIS.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Nesser-02	In addition, I oppose the Navy's testing of depleted uranium weapons anywhere.	1) Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Nesser-03	I oppose the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them.	We recognize your concern but would like to reassure you by informing you that the U.S. Navy has conducted sonar and underwater detonation activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar or underwater detonation training exercises in the NWTRC.
Nesser-04	I oppose invasive testing of any kind in a underwater sanctuary.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.

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Nesser-05	I oppose testing of any kind without independent environmental impact research and I oppose testing without viable citizen oversight of environmental compliance.  I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems.	Many of the Navy's action undergo independent review by other regulatory agencies in the process of permit application, as well as, citizens such as yourself during public commenting periods. The Navy is very concerned about the environment and is a leading sponsor of marine mammal research, spending \$26 million in FY08.
New	Please this is not good for our sea life. Look at what is happening in Australia 200 TWO HUNDRED whales and dolphins have beached themselves, because of confusion, starvation and hearing loss. The Navy can be really proud of themselves for this, good thing we have an endangered species list. After all this military testing you won't have anywhere to test because the waters will be protected after the whale is added to the endangered species list. Is this seriously what you want. I refuse to allow my children to grow up and not know about whales and dolphins. "Kids there used to be these large majestic creatures that lived in the ocean called whales, but now instead we have sonar abilities beyond our wildest dreams we can listen to cell phone calls in Europe now." Sorry that conversation doesn't sit well with me. I have nothing against new technology until it begins to wipe out species.	This comment has been duly noted.
Newkirk	NAS whidbey should be closed do the navy is encroaching on North whdbey island residents. some of the familes that are still on the north end have lived on thier property s since long before the navy came. since the navy has come to town islanders living condition have gone down hill with the increased noise from the planes and the increase in crime. the Navy so far is not wanting to be a good neighbor to island residents so we as island resident would like the navy to close this BASE	This comment has been duly noted.
Newman-01	this is a sorry use of taxpayer funds during a national economic crisis     no end-date?!	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Newman-02	3) please do not pollute the ocean and air off our coast	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Newman-03	4) it is unecessary to prove that we are the toughest navy on the seas	This comment has been duly noted.
Nilliamu	Like all the ideas hatched by the Killers, Cheeny and Bush, this is the most useless and worthless. Please leave our coastal waters, and stop bothering the wildlife and the humans. Go play with yourselves out in the middle of the Pacific somewhere; maybe where that mass of garbage floats around. As for the NW Training Complex, it is NO, NO, NO, NO, NO, NO, NONO, NONO, NO,	This comment has been duly noted.
Nitschke	I urge you to reconsider any increase in electrical transmission of any type, sonar, microwave, etc. off the sea coast of the NW.	Reflecting the quickly evolving science in the study of effects on marine mammals and other marine species, this Draft EIS/OEIS uses a different methodology than was used in previous studies. This methodology,
	Forty + years ago when the effects of electrical activity on wildlife mortality	developed jointly by the Navy and the National Marine Fisheries Service,

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	(from invertebrate to mammals) was researched in the Great Lakes area, it was determined that the environmental impact of that proposed Navy project was deadly to wildlife and their habitat. This was true especially for the activities planned for the Lake Michigan coastal regions.	appears to more accurately depict the probability of a response to mid- frequency active sonar and other activities effects. See Section 3.9 for a more complete discussion on sonar and its effects.
	This current proposal for increased disruption of wildlife and habitat is preposterous. First it is a waste of financial resources. Second, if you examine the published research available you will find that simulation training is just as effective as field exercises for most of these missions. It does not negatively impact the life or habitat of our wildlife,coastal ecosystems, or OUR seaworld.  Please reconsider this proposed travesty in the light of evidence based information and published research on these topics.  Mary Lee Nitschke, PhD, CAAB  Professor of Psychology	The level of training activity required to meet training requirements in NWTRC cannot be assumed to be sufficient according to public opinion or similar to requirements in other range complexes. As explained in Section 2.3.2.3, "A reduction in levels of training within the NWTRC would not support the Navy's ability to meet United States Code (U.S.C.) Title 10 requirements." Decisions on which alternative to pursue is to be considered by Navy representatives in light of all impact analysis and given all the relevant facts through the the NWTRC NEPA process.
Nolen, B.	I do not, and will not support the expansion of the Northwest Training Range Complex. This must be voted on by the individual states involved. You are violating states' rights.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Nolan, N.	I am very concerned about the welfare and health of the Marine Mammals in the Pacific N.W. waters. I stand behind and firmly support the well documented and researched opinions that all SONAR Naval activity and military training is extremely detrimental and harmful to the environment and health of Marine Mammals in Pacific NW waters.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Noll	I do not want any training of any type in california waters.	This comment has been duly noted.
Nomura	We are trying desperatly to clean up the Puget Sound Basin. It doesn't make sense to create more polution and problems in these already troubled waters. An EIS is the least that should be done!!	To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Navy complies with all applicable environmental laws, including NEPA and its requirements.
		All water pollution concerns of Navy actions are handled in Section 3.4.
North, C.	PLEASE STOP FLYING JETS OVER LOPEZ ISLAND!!!! We have no place to go. This is our home. You can fly anywhere. Why over us????	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore,

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		while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
North, E.	I was walking on the beach near Carlsbad, CA yesterday and came upon a dead seal. It didn't have shark bite marks on it. Perhaps underwater sonar testing killed it? PLEASE stop the assault on local human and marine life by banning weapons testing!	Please refer to Appendix E Cetacean Stranding Report of the EIS/OEIS.
North, R.	I was born and raised on Lopez island. My parents moved here in the 80s because they wanted to raise their children in a clean, healthy environment. I would like to raise my own children here. For many years our island has been subjected to terrible noise pollution, destroying the quality of life for many residents. As well, we have higher rates of cancer here in the San Juans than can be accounted for in a rural community. Many of us believe the "vapor trails" from aircraft are essentially the same as being crop dusted with chemicals. This doesn't make us feel safe or protected by our military. It makes us feel like we are being harrassed and sacrificed for some supposedly "noble" cause. Our Orca whale population is nearly extinct due to water pollution and excessive sonar use. What possible reason can the navy have for doing military exercises over densely populated areas unless it's to see how many civilians in a war would be harmed or die from chemical exposure? Most people would rather die honorably than be poisoned by their own country.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
North, S.	I am horrified and appalled that the Navy plans to furthur expand their training grounds and subject innocent citizens not only to more noise pollution, but even more frightening, chemical pollution. These toxic chemicals have terrible long term consequences, especially on children. Why must you destroy our quality of life when you have the entire Pacific Ocean to practice over? Why does the Navy need to conduct training over heavily populated areas unless it is using its own citizens as ginea pigs? Shame on the U.S. Military!	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.  The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.  The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.

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		All potential impacts have been considered.
Nuccio-01	I am in favor of the "No Action Alternative" in the Northwest Testing Range Compexies Draft of EIS.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Nuccio-02	I also oppose the Naval use of depleted uranium anywhere under any conditions, but in particular in a fishery that is currently at tremendous risk. The commercial salmon fishery was closed in Oregon and California during the summer of 2008 at great expense to both states.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Nuccio-03	I also oppose sonar testing that may damage the hearing or location abilities in whales and other marine mammals.	Comment noted; however, please consider that the U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Nuccio-04	The Navy could, instead, take an active role in the protection of marine environments and in preserving an externely valuable fishery. The people of the Northwest and of California cannot afford to lose their commercial fishery due to the use of depleted uranium. Neither can they afford to lose the tourism industry that marine mammals in these coastal areas attract.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
		Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics. Loss of marine mammals was not discussed in this section because it is not expected to occur at appreciable levels based on the analysis in this EIS.
Nuccio-05	Whales and other marine mammals would be affected by the use of sonar, as has already been established in other waters. They would also be affected by a loss of the salmon runs or salmon that have been poisoned, especially since these toxins become more concentrated as they move "up the food chain". If human consumption of food from the seas near the Northwest is eventually affected by the use of depleted uranium, it will affect the economy of the region, as well as impacting human health. Thank you for your time and attention.	Marine mammals have been affected by sonar in other waters in the past. It was determine by the Stranding Response Organization that these events were caused by compounding conditions that are not present in the NWTRC. Please see Appdenix E (Cetacean Stranding Report) for additional information.
Nutter-01	The U.S. Navy must heed the environment and not dump depleted uranium and other chemicals into it with its expanded weapons testing.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the

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		earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Nutter-02	AND once again, low frequency sonar does cause hemorrhaging and death in whales and other marine mammals, and the Gray Whale Migration is ongoing now along the Pacific Coast. I therefore strongly reject the expansion of the weapons testing in the Pacific Ocean along the western U.S. Coast. Your EIS is inadequate and sugar coated.	As stated in section ES.1.5.7.1 of the Executive Summary, the proposed action of this EIS/OEIS does not include the use of low-frequency active sonar and was not analyzed as a result. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Oberweiser-01	The Navy's plant to deploy 9.651 sonar emitting buoys in the waters off the Pacific Northwest coastline is totally unacceptable. Also unacceptable arre the Navy's plan have underwater explosions take place both near the water's surface and near the bottom. These sonar and explosion exercises will kill or disable the Gray whales who will be migrating through these waters. The Navy in the long run with their sonar devices may be wiping out entire populations of whales and seriously depleting others. Generally wherever there is a large whale stranding, there is a military exercise in the area. Sonar is killing more whales than we know about And we still don't know what the explosions will do to the other sea life in the Pacific Northwest coastal waters.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Oberweiser-02	Your E.I.S. is inadequate. It makes absolutely no mention of the disruption that thousands of sonar buoys would cause to the yearly migration of the Grey Whales up and down the western coast of the United States	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
OBrien	I am completely against the navy using the sea to test weapons or sonar. How can you possibly think that what you are planning will not effect all the life that exist in the sea. How arragant that you feel that the life of the whales and all the wildlife in the sea is yours to traumatize and/ or destroy. Please do not test these weapons and sonar in the sea anywhere. It is your responibility to find a way to test these things without harming any life of any kind anywhere.  Carol O'Brien	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Obst	Please stop Killing whales and stop the testing!!!	Comment noted.
Oder	The deadline for comments must be extended until after Rosalind Peterson's	To ensure the public has ample opportunity to comment, the comment

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	FOIA request has been complied with. As it stands now, with the deliberate secrecy and inadequate disclosure, the Navy is putting itself in opposition to the public it is supposed to be serving and treating us like enemy combatants. This is not the way a military should operate in a democracy.	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The FOIA request is a separate process and is being handled along with this EIS/OEIS NEPA process.
O'Farrell	In my opinion, your proposed use of our treasured Pacific Northwest waters for a military training range is a terrible idea.	This comment has been duly noted.
Ogilvy	I understand that you want to test, but appeal to you to understand the consequences of this testing on marine mammals. Yes, defense is important, as are the humans it is meant to protect, but not at the expense of inhumane actions. We are not the only species on this earth; we depend on the survival and health of many other species as well as on the general health of the oceans. Do not go forward with these test maneuvers. Your supposed "safeguards" are not safe. Thank you for your attention, Heather Ogilvy	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
O'Gormley, L.	Please do not increase your flying rate! Our quality of life is already affected by the incredible noise of your planes passing over our house. They fly quite low and have woken us up at night. I have a 3 month old baby girl and the sound of the planes often wake her up from her nap. It is so loud we have to cover our ears. The noise is highly offensive and quite scary to our little girl. We feel the current amount of flights is already very obtrusive. I can't imagine having to cope with an increase. Please do not make us!!!!!!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
O'Gormley, P01	1) Do not increase the flight training over the Skagit Bay area. The sound of the jets is disturbing in every way. We don't want more of it here	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
O'Gormley, P02	Nor do we want our precios tax dollars put towards this wasteful expendature	This comment has been duly noted.
OHair	No, no, no! The sea life, including the marine mammals will be negatively impacted, the tourism industry (already suffering) will be negatively impacted at a time when the economy needs to be improved, and the general peace and well being of the coast residents will be affected. I was just there for the week and heard/saw the jets from Brookings to Yachats and that is not what I want to hear when I go to the coast. The people of Oregon care about their coast - there is a reason the beaches are all public. Don't make the waters off Oregon your training ground. It's not okay. I will also be writing/calling the governor and whoever else might have say in this.	This comment has been duly noted.
O'Keefe	I beg you to hault this plan the Navy has to train for war on our entire Pacific coast. The wales & other ocean life have had sufficient chaos in their home	Comment noted.

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	waters. the Naval base at Whidby Island makes sufficient noise. Please just let us enjoy our coast in peace.	
Oliveau	The navy sonar will impact marine mammals in a very negative way. We don't need war games, we need protection for the ocean itself, and all the life within it.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Oliveira	Absolutely NO on ANY extension of the training RANGE or RANGE of activities. The military has proven to be a liar when it comes to EIS and wildlife studies (like how you are killing whales and other marine creatures with your "SONAR").  ENough of your military industrial complex. WE, the PEOPLE, do NOT NEED You any stronger, bigger or with any more power than you already have. YOU SHOULD HAVE LESS. You have screwed up the world with your preemptive attacks BASED ON LIARS.  We are sick of your HAARP, your CHEMTRAILS, your EMF Weapons, "smart" weapopnsALL OF IT!  Get off OUR COAST!  mauro oliveira	This comment has been duly noted.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Olsen-01	With all the belt-tightening recommended by our President all the way down to our County Commissioners, this seems like the most opportune time to eliminate such a controversial and money-wasting program.  My reasons for being against such a program are many:  1. Even if the court sided with the Navy, the Navy still has a chance to do what is right - at this time not endangering aquatic life off the coast of Washington or on the west side of Whidbey Island.  2. I oppose testing of depleted uranium weapons ANYWHERE.  3. I oppose the use of underwater sonar tests which might harm the hearing of sea mammals.  4. I oppose invasive testing in an underwater sanctuary.  5. I recommend INDEPENDENT research for any EIS.  6. I recommend citizen oversight of environmental compliance.  7. The U.S. Government is responsible to protect our fragile marine ecosystems.  Please, please, please consider all these comments above, Vern Olsen	

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Olson-02	Keep up the good work! Keep flying over the islands. We love seeing AND hearing the planes. We're proud of you, the military, and our USA! Land on Orcas sometime and I'll take a ride. Without your training and protection, we couldn't live here. God bless the USA	This comment is duly noted.
Ormond	The Navy should not take over our coastal waters as training area.  It may very well drive our whales crazy.  It will very well harm our fisheries and our fishing fleet.  It will also increase the possiblity of oil and radioactive spills.  Do not train on our coast.  Thank you  Respectfully submitted, Brian Ormond	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them within the NWTRC EIS/OEIS. Potential impacts to Fish, Marine Mammals, and Socioeconomics have been discussed in Sections 3.7, 3.9, and 3.14, respectively, and potential impacts from Hazardous Materials and Wastes are discussed in Section 3.3.
Ornstein-01	I am requesting that the U.S. Navy and the Department of Defense cancel all of their plans to expand Warfare Testing in California, Oregon, Washington and Idaho for the following reasons. 1) Chemicals of War- Toxic chemicals that are used in war and warfare testing will affect human health, destroy marine life, algae (our primary source of oxygen, trees (our second source of oxygen), agriculture =, and wildlife by polluting our water, soil and air.	The decision on which Alternative to choose is a decision that will be made by the Secretary of the Navy upon conclusion of the NEPA process for the NWTRC. This decision will take into account all factors from Navy training to environmental concerns.  There is no chemical testing occurring in the NWTRC.  With respect to public health issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Ornstein-02	Chemicals that may be used like aluminum, depleted uranium, and white phosphorus and others are deadly. We have to stop polluting our environment with toxic chemicals.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Ornstein-03	Ocean Testing - Warfare testing in the Pacific Ocean may trigger earthquakes causing death and devastation.	This comment has been duly noted.
Ornstein-04	3) The public was not properly notified of the public hearings. Only 5 public hearings were held in small towns that most people haven't even heard of and that have a very small population. Hearings should be held in the large capitol cities and other large cities where there is a large population of people. California hearings should be held in Sacramento, San Franciso, Los Angeles, Long Beach, San Diego as well as smaller cities along the Northern California Coast because the ocean current of TOXIC SOUP will eventually reach Southern California shores and cause destruction to marine life, etc.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.

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		Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Ornstein-05	4) The public was not properly notified about the public comment deadline to respond to the EIS. 5) Legislative representatives have not had time to review the (EIS) and make comments. 6) Legislative representatives have not had time to review the (EIS) and make comments.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Finally, an additional meeting was held in Tillamook, OR on February 26.
Ornstein-06	7) Not all of the toxic chemicals and heavy metals have been properly disclosed. I am requesting a list of all the toxic chemicals that will be used by the U.S. Navy, U.S. Air Force and any other branch of the Department of Defense as part of these warfare testing programs be disclosed. The affects of using these toxic chemicals and heavy metals on humans, animals, wildlife, marine life, and the environment should also be disclosed.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Ornstein-07	8) The EIS fails to identify all of the air quality, water quality and soils impacts of their programs.	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Ornstein-08	9) The major media (television, newspapers,radio, etc.) were not notified to imform the public of public hearings and comment deadlines.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Finally, an additional meeting was held in Tillamook, OR on February 26.
Ornstein-09	I would like to be notified any future public hearings regarding the Environmental Impact Statement(EIS) to expand warfare testing in California, Oregon, Washington, and Idaho. I request to be notified by telephone where I can send a formal letter and provide more documentation about the health and environmental affects of expanding this program. I am requesting to extend the final filing for comments at least 6 months from April 13, 2009, to allow myself and other organizations time to review the EIS and prepare a written resposne with documentation. Under the Freedom of Information Act, I am requesting a complete list of all chemicals that will be used during these testing programs. I look forward to hearing from you regarding my requests and your notifications of public hearings Kathy A Ornstein	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Please refer to the following section of the Draft EIS/OEIS for the environmental impacts regarding hazardous materials: 3.3 Hazardous materials

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		With regard to FOIA, the NEPA process is separate from the FOIA process.
Osborn-01	Preparing for the wars of tomorrow? By destroying the environment of today? The only reason you are able to push this forward is because one of Bush's bought judges reversed the restraining order on you people!	This comment has been duly noted.
Osborn-02	I say a resounding NO to this plan!	This comment has been duly noted.
Osborn-03	One test you've never made is to put some navy admirals into wetsuits and scuba gear and put them down a hundred feet or so and run your sonar over them for a while. Then, after they have stopped bleeding, let's discuss the issue further.	This comment has been duly noted.
Osborn-04	As to dumping more concentrated DU into the environment, that is insanity. It has a half-life of 4.5 billion years. Yes it is naturally occurring, in very small concentrations. Where the concentration increases, so do cancers and terrible mutations and failed births.  The eco-system is stressed enough without the military poisoning and polluting it further with their war games.  Please, no action unless it is to decrease the damage already being done.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Osis	Near shore waters that includes to the edge of the continental shelf holds a rich wealth of marine life. It is an upwelling area that by definition is the richest areas of the productivity in the worlds Oceans. Valuable fishery resources are located in these waters as well as a rich abundance of invertebrate, marine mammals and a great abundance of a wide variety of sea birds. We already have disruption of this ecosystem through fishing activities and shipping along the west coast and into the Port of Portland. Please proceed with your plans and operations very carefully with the valuable marine resources and wealth we have here in mind.	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.  Chapter 7 of the Draft EIS/OEIS lists the resource authors and preparers of the document.  The authors of the EIS/OEIS drew heavily from independent scientific studies and research papers to ensure the best available science was considered in the analysis of potential impacts to the environment.  All potential impacts have been considered.
O'Sullivan	The local Audubon chapter has just alerted members to an alarming proposal involving heightened military exercises in our ecoregion. I do not need to list all the proposed activities you are planning since you know them. The damage to endangered and at risk species, and precious habitat both in and out of the waters would be dramatic and cannot be tolerated. Conservationists have worked too long and hard to preserve these things to allow you to play your war games and wantonly destroy them.  I am just one person but I belong to and support a number of environmental organizations and will notify all that can be reached by email of your planned destruction. You may be receiving a number of responses from them as well.	This comment has been duly noted.
Ovitz	I object to the concept of testing military devises that can potentially leave a	The Draft EIS/OEIS is a product of environmental scientists and biologists

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	residue of pollution, in new areas of the U.S. mainland. The fact that the testing will be taking place is obvious evidence that there are many unknowns. The decision to test should not be in the hands of people who will not have to suffer the affects of potential mishaps. The expansion of testing potentially toxic weaponry into new areas of the U.S. mainland should only be considered after the most comprehensive and transparent reviews. The power in money and strength of the U.S. military can be a far greater danger to the lives and health of American citizens than any foreign adversary if not firmly under the control of the civilian sector. I firmly and fully support the requests as outlined by Rosalind Petersons Freedom of Information submission.	contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
Owens	Our organization is extremely concerned by this plan for expansion, particularly into the Olympic Coast National Marine Sanctuary. This biologically rich area is one of the last near-pristine pieces of coastline left in the lower 48 states. The many documented reasons that made it eligible for inclusion in the Marine Sanctuary program, should protect it now from the horrendous activities detailed in this proposed training range expansion plan. We have great concern for the well-being of the many marine mammals who live full time on the outer coast, as well as for those who migrate and transit through at all times of the year. Gray whales are almost always present. March brings the north-bound migration, including the very sensitive and vulnerable mothers and calves who depend on resting and feeding in the near-shore areas through May. During this same time, March through May, the Washington State resident gray whales arrive to their feeding areas on the outer coast and in the Straits. They remain until November or so when the southbound migration brings almost the whole Eastern Pacific gray whale population back through the Marine Sanctuary in December and January. We are not scientists, but common sense tells us that there will be extremely detrimental effects to many species of sea-life in the Sanctuary if this expansion goes forward. Every species from benthic to seabird is already trying to live with warming water, acidification, low oxygen, loss of prey, and the acoustic bombardment of very busy shipping lanes. What will the cumulative effects be of all these factors PLUS the Navy training plans, on all the sensitive inhabitants of the Sanctuary? We find no answer in the Navy's analysis. Please note our additional frustration with the comment period. There should have been more public hearings and a longer time for comment. Respectfully, Margaret Owens	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.  Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tilamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Ozanne-01	1) I ask that hte Navy suspend all sonar and explosive testing off shore until and even if it can be done in a way that does not further harm our struggling marine life. National defense is important, but if we destroy life, what is left to defend. We need healthy off shore ecosystems. They have been greatly injured by human activity. Your testing is an activity that we must do without for now.  P.S. Prenatal ultra sounds turn out to hurt our fetuses. I am sure sonar hurts marine mamals as well.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its effects.

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Ozanne-02	2) There is no excuse under any circumstances to release "depleted uranium" in our oceans.	With regard to Depleted Uranium; following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Paffumi	stop the sonar in our oceans. NOW!!!	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Palencia	Enough already.  Definitely against expansion of the perimeters.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Palka-01	I want to register my comments as being in favor of the No Action Alternative with regards to the proposed expansion of testing alternatives in the Northwest Training Range.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Palka-02	I am opposed to the testing of depleted uranium weapons anywhere - they will damage our marine ecosystems and pose possible hazards to the marine food chain and threaten marine mammal populations and especially within the marine sanctuary off the Olympic coast.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
		The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Palka-03	Increased use of sonar testing will also threaten local Orca and dolphin populations.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine

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		mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Palka-04	I also oppose testing without independent environmental impact research and viable oversight of environmental compliance. Thank you, Yvonne Palka	Many of the Navy's actions undergo independent review by other regulatory agencies in the process of permit application. In addition, citizens such as yourself provide comments during public commenting periods.
Palma	As an East Coast resident, I can't condone the use of any of our nations precious coastline for target practice. The effects on public enjoyment, sport, the fishing industry and the environment would be devastating and irreversible.	The Draft EIS/OEIS described potential economic impacts to fishing in Section 3.14.2. In this section, the analysis concluded that impacts would not be significant due to advanced public notification and primarily short-term duration of military activities. No new closure or restricted areas are proposed.
		Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Palmer, L.	Since your website was down for 21 days, I request an extension of the comment period. Many people may have been deterred by this and have to be re-contacted to urge them to comment.  Thank you.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Palmer, M.P.	Underwater detonations are another instance of destruction to our planet. By now most intelligent people recognize an interconnectedness and interdependence of all species. Underwater detonations are simply declaring preemptive war on species who live underwater. They kill. They are irresponsible and the Navy is acting with wanton destruction. When your children and grandchildren no longer have whales and other marine animals because you have killed them, what will you say? There should not only be no escalation of underwater testing, there should be a cessation.	This comment has been duly noted.
Palmer, R.	As Vice Chair of the Siuslaw chapter of Surfrider Foundation I strongly oppose the proposal to expand the naval training areas in the Pacific Northwest. I live on the Oregon Coast just south of Florence and I have noticed the impact the jet training has had on the local wild life, not to mention the disturbing sound of f16 fighter jets flying over head frequently. Please reconsider another location, perhaps over a less sensitive ecological area.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. F-16's are United States Air Force assets.
Palmer, S.	I am writing to express my strong opposition to plan to expand the Navy's	The decision for the NoAction Alternative is a decision that will be made

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	Northwest Training Range Complex. I am concerned about the impact to marine life off the Oregon coast. Please consider a "No Action Alternative." The proposed navy testing would have negative impact on tourism amd coastal fisheries. The Oregon coast is a valuable economic and cultural treasure that the proposed naval testing would endanger.	by the Secretary of the Navy upon conclusion of the NEPA process for the NWTRC. This decision will take into account all factors from Navy training to environmental concerns.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Paltin	Please halt plans to "train" off the West Coast. The radioactivity from "depleted" uranium, the jet fuel, the oceanic noise pollution, and G-d knows what else you are planning to use is unacceptable by the citizenry and to the public health (and the health of many other species.) The Navy's record of environmental damage, much of it permanent, is shocking. Examples which come to mind are the currently degrading barrels of radioactive waste dumped off the Farallon Islands, and the contamination of South Pacific Islands during atomic bomb testing. One feels like our own Navy is making war on us, and I do not feel this increases our security in any way. For the health of our delicate ecology and human life I implore you to abandon this project immediately! Sincerely, and thank you for your kind attention, Sharon Paltin, M.D.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Parker, B.	There are currently 63 species listed as either threatened, endangered or "of concern" in the Puget Sound. Of the 63 species listed by one or more jurisdictions, over-harvest, habitat loss, and chemical contaminants are the most commonly cited causes for species declines. Additional military operations including plans to expand operations, adding dummy minefields, scheduling hundreds more training flights and warfare simulations over land and sea, and increasing the use of sonar will add potential threats to endangered and threatened whales and other marine mammals throughout the region. This month, President Obama overturned the Bush Administration's endangered species rule upon which your requests for increased Naval actions rests. Allow the scientific process to reign and stop the upswing of operations. We cannot remain helpless to the impact on our enviroment. I am against increasing activities in this region.	This comment has been duly noted.
Parker, Jerome-01	I oppose expansion of the Northwest Training Range Complex. What profit a nation to rule the world and destroy it in the process?	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Parker, Jerome-02	I can only support this EIS's NO ACTION Alternative. Please do not do any expanded testing in the oceans of the Pacific NW. Thank You allowing my comments and concerns.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Parker, Judith	I have spent a large part of my 56 year life at the Oregon Coast. My father held a second career as a commercial fisherman out of Tillamook Bay. I do not support this expansion of operations. Our NW coast and it's off shore waters are already being affected by warming and other environmental	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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	changes that have been and will continue to result in decreases of the fish and wildlife that exist there. Alternatives I and II only contribute to this demise.	
Parks	I live on the coast and do appreciate the whales and all of the migrating sea life that would be disturbed by the navy training. the whales have trouble with the sonar. Many diverse types of sea life will be devastated. not to mention our up coming wave generated power that will be here of the Oregon coast. We must not allow any discarded military shells, or dubree from the military to be discarded anywhere along the pacific coast. you say it will not disturb the residents I charge that it will disturb all the residents living in the ocean. please do not cause this to happen. thank you . absolutely intolerable	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS. All discarded material discussion can be found within Section 3.3; Hazardous Materials and Wastes.
Patton	I am writing to PROTEST the use of the Northwest Pacific Coast for war games, sonar testing and explosives testing. THIS IS DEADLY TO OUR BEAUTIFUL COAST AND WILDLIFE.	The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
	The Pacific Northwest is a tourist destination. In these poor economic times we need all of the tourist dollars we could get.  Also, we need to protect our Pacific whales and mammals, not destroy them with sonic blasts and the ruination of marine habitat.  I urge you to STOP with plans to destroy our coast.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Pauls	I disagree with the Navy doing any testing in our area. There are studies saying that the testing has after effects on the orcas and they already have enough problems without adding more to it.	This comment has been duly noted.
Paulson	What's this I hear about "The US Navy's incomplete environmental impact statement and a US Senate aid said the bombing would begin March 11 over Washington, Oregon, Idaho, California and south of the Baja Peninsula, Nevada, out to sea at least 200 nautical miles, using high-altitude releases of "depleted" uranium weapons, white and red and yellow phosophorous weapons, radon and microwave weapons for weather disruption, etc., and underwater sonar and explosives with various poisons, and for practice of terrorist attacks (false flags?) and martial law" ??? In the name of all things holy, I forbid it!	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  Potential impacts associated with phosphorus use are described in
		Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Pecaric	Not just no increase in warfare training off the Oregon Coast, but an strong objection to be using such pristine environment and animal ground for such harmful activities.  i oppose such warfare in my state.	The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.

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Pedersen-01	Like many Port Townsend citizens, I am concerned about the lack of time that has been given to study the potential effects of the Navy's proposal. Concerns about the effects on marine mammals and about depleted uranium are very important to me. More time needs to be allowed to evaluate the scientific information and make use of the knowledge of the people of our region.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The cumulative impacts analysis addresses the environmental impacts that result from the incremental impact of Navy activities when added to the past, present, or reasonably foreseeable future actions that affect the same resources. Table 4-1 succinctly depicts the categories of past, present, and reasonably foreseeable future actions that affect cetacean populations. Identifying such activities and in fact comparing them for relative impacts is an appropriate approach to cumulative impacts analysis. The Draft EIS/OEIS does more than simply compare activities; it analyzes in detail the effects of Navy actions on specific resources, and places those in the context of other sources of impacts. With regard to Marine Mammals, the cumulative impacts analysis accurately concludes that Navy activities, while they may affect marine mammal species, will not present significant impact.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Pederson-02	All I can really think to say is I strongly disapprove of this.	This comment has been duly noted.
Peltz	I object to this use of our beautiful coastline. If the budget supports it, why couldn't you find the middle of the ocean for your firing range practice. Just a ridiculous idea, and a disruption of nature and the environment.	This comment has been duly noted.
Peragine	The coast, where humans and nature have a convergence zone of activities, is the least sensible place for training practice. Much practice could now be 'virtual', and if real practice is needed, for chart-reading and avoiding obstacles and learning seamanship, assurances that no explosives, sonar, or accidentally imported viruses or sea animals near the coast, must be made to the public with proof. This is only bare-bones sensibility. The public would heartily hale the Navy taking a lead on these matters!	This comment has been duly noted.
Peregrine	As a 40-year resident of the lower boundary of your proposed area of training, and speaking for the whales, seals, sea lions, porpoises, and other marine animals that reside or pass through these waters, your proposed sonar plan is not acceptable here. It is a mystery to us why you choose an an area so rich in life & come in to harm it. On behalf of myself & the animals,	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating

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	please take your war games elsewhere.  Nancy Peregrine	broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Perera	I'm against more sorties. They have already greatly increased over the last year. How about more over water and less over inhabited land. They are frequesntly over my house now. No More!	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Perricelli-01	I am very concerned about the proposal for increased training off our coast. Our oceans are already declining from varied environmental assults. Now they would have the impact of increased ship and aircraft traffic, weapons testing, and the use of "active sonar" on whales and other marine mammals, and on possible disruptions to the marine ecosystem that may also harm fish and bird life.	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Perricelli-02	Disruption of fragile fisheries and limitations on recreation can have a further negative impact on humans.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Perry	Your EIS regarding the whole Northwest and affecting so many and so much is a thousand pages to study carefully and the deadline to make comments must be extended beyond the March 11, 2009 deadline. You are not protecting citizens when you kill the earth. Your actions must be studied and controlled.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Peters	The Northwest Training Range Complex plan should not be approved till the public have been fully informed about it e.g., until multiple public hearings have been held about it, in all of the states and counties within range of it (intentional or overblow range), and all the questions at http://www.newswithviews.com/Peterson/rosalind114.htm are answered, to the public. Please fully publicize answers to all of those	Rosalind Peters's comments have been responded to in this Appendix. With regard to notice, three of the five scheduled hearings were held in Washington because the Navy's proposed activities would continue to be concentrated in or off the coast of Washington. Some proposed activities could occur off the coast of Oregon and Northern California, so a public hearing was scheduled in each of those states. Due to a request in

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	questions, organize many more public hearings in all the areas involved, and extend the public comment period beyond those hearings. I've so far met only 2 people who've heard of this plan. If that is the Navy's intention, it's not government by the people for the people.	February 2009 from the Oregon Congressional Delegation, a sixth public hearing was added, in Tillamook, Oregon. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; and February 26, 2009-Tillamook, OR.
Petry	Hello - please log my public comment as "against sonar testing". I find it ironic that you have whale videos on your website and yet go ahead with high frequency sonar testing that is clearly harmful to whales.  I understand about weapons testing and training (project officer on P-3C update 2.5 avionics suite at Patuxent River) but this current discussion about the sonar is clearly harmful and unless we are going to war against whales it is pointless expenditure of time and effort, and very harmful to these peaceful creatures.  thanks and regards Mark Petry	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Phelps	PLEASE don't disrespect us with your blatant disregard for our right to live a healthy life. Please don't disrespect the beautiful creatures who share our ocean with us and cannot speak for themselves. You do not have the right to so this and we will all pay dearly for your short sighted ignorance. Shame on all of you - you know better and yet pretend that you do not.	This comment has been duly noted.
Phillips, A.	I am opposed to this proposed expansion of weapons testing. These are fragile environments that need protection. There is no end date specified and the discussion of environmental impact is glib at best.	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.  The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Phillips, J.	I am commenting on the potential increase in training flights out of the Whidbey Island Naval Air Station. I am concerned that an	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur

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	increase in flights will be detrimental to both wildlife and people who live within earshot of the flight routes. The current level of noise and consistency of flights over inhabited areas is already unacceptable. Any increase would be completely intolerable. While I recognize the need and importance for doing this kind of flight training, I hope that greater care is put into the concern over disturbing people, livestock, and wildlife in the future. I also have concerns that increased flight training=increased spending in a time that we desparately need to spend wisely. Thank you for your consideration and your service.	in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Phillips, R.	I support the following statement by People for Puget Sound. Please, we are still a rural area. We have plenty of military action already in this area that is mostly national parks and forest. We all came to live here because we like the quiet. "While we recognize the need to maintain military readiness through training, the "no Action Alternative" (maintaining existing training levels) is all that we can support at this time due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's proposed expansion on those species."	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The cumulative impacts analysis addresses the environmental impacts that result from the incremental impact of Navy activities when added to the past, present, or reasonably foreseeable future actions that affect the same resources. Table 4-1 succinctly depicts the categories of past, present, and reasonably foreseeable future actions that affect cetacean populations. Identifying such activities and in fact comparing them for relative impacts is an appropriate approach to cumulative impacts analysis. The Draft EIS/OEIS does more than simply compare activities; it analyzes in detail the effects of Navy actions on specific resources, and places those in the context of other sources of impacts. With regard to Marine Mammals, the cumulative impacts analysis accurately concludes that Navy activities, while they may affect marine mammal species, will not present significant impact.
Phillips, S.	Please do not test bombs or sonar in our oceans off our beautiful northwest coast anywhere off the US west coast in the pacific ocean, these tests harm all fish in our oceans, and the harm is unspeakable, please stop testing bombs and sonar NOW! Thankyou. Stuart Phillips, Eugene, Oregon. Thankyou. Stu. Stop testing ocean bombs and sonar in our lovely oceans, it adversely affects all marine life within range of these abomidable tests, thankyou. Stu Phillips, Eugene, Or.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Piazzon	Our environmental crisis is huge. We now have an administration that is looking forward, this project is looking backward. We do not need any more disruption along our coaststhis is a fragile area for marine life, plant life and human life. Do not continue with thisplan simulations and alternative games on computers. Use tecnology to save our environment!	This comment has been duly noted.
Pickard-01	No national Navy security needed in Washington coastal waters. Bad plan, no regard or respect for sea life, the waters, or the people. Drop it.	This comment has been duly noted.
Pickard-02	To Whom It May Concern: I am a third generation resident of Coupeville on Whidbey Island. I have been a fisherman, acquaculturist for twenty years and a lawyer for thirty. I have always been a boater and currently sailing a large cutter. I am adamantly opposed to expanded exercises by the military in the	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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	Strait of Juan de Fuca, the Pacific Ocean and Puget Sound. In my lifetime nearly all sea life has already been extremely threatened or disappeared. The bait is gone, the birds are gone, most of the fish gone, whales mostly gone, etc. And, all of this has happened while our marine environment has been under the supposedly watchful eye of the beauracrats at the state and federal fisheries departments. I hope this agency has more wisdom and awareness and votes against this continued and expanding horrible degradation of our marine resource. Ken Pickard Coupeville, Wa.	This comment has been duly noted.
Piercy	I'm concerned about the proposed war weapon testing over WA, OR, Ca and ID. I don't want eihtr my family nor I to guinea pigs for weapons testing, not to have our Marine life destroyed by underwater explosions.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
Pieri-01	I am very concerned about the health effects for myself and the damage that would occur to ocean wildlife off the coast due to any bomb testing or low frequency sonar testing.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.  The proposed action of this EIS/OEIS does not include the use of low-
		frequency active sonar and was not analyzed as a result.
Pieri-02	The "track record" for the environmental concerns of the navy is not very favorable in protecting wildlife. I don't see a need for this expansion of the navy test area.	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Pieri-03	I am also very concerned about the cost in damages to the fishing industry. I am also a concerned taxpayer who is loathsome to spend more tax dollars to expand the navy test area. We need to be more fiscally conservative in these difficult economic times.	The Draft EIS/OEIS described potential economic impacts to fishing in Section 3.14.2. In this section, the analysis concluded that impacts would not be significant due to advanced public notification and primarily short-term duration of military activities. No new closure or restricted areas are proposed.
Pilafian	This proposed expansion of Military Training down the West Coast MUST NOT HAPPEN!! Do not continue with this proposal! The pristine Oregon Coast and Northern California Coastline is a precious resource. Do not allow the Navy to claim it as their own to mess with. Thank you	This comment has been duly noted.
Playa	While I understand that training for security is important, I do not believe that using our marine environment is an appropriate venue. The military should act in a way that respects the environment and the population. Using our fragile Sound for such activities will degrade the land and the communities you are charged to protect. Please find a place - if you must have one, in an area that will not be as radically changed as ours for your expanded training. Thank you for your service to our country, and for being sensitive to what you are working to protect.	This comment is duly noted. The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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Poat	I oppose the expansion of the Navy's Northwest Training Range Complex due the impacts on threatened and endangered species. Especially with proposed testing of new systems and inadequate marine mammal monitoring, a "No Action Alternative" is the preferred option. The impact on the environment is significant, as is the economic impact on fisheries and tourism. The Oregon coast is a valuable economic and cultural asset that should be valued, not destroyed!	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Poates	I do not acceptthe premise testing war products and weapons using marine life and the public as guinea pigs is in our best interest. This impacts our food supply (fish and seafood)and imperils endangered marine mammals who have repeatedly become disoriented and beached themselves en masse as a result of these tests. Is there no concern for citizens who are in these waters? This is not necessary to protect us. I enjoy and cherish these coastal waters and marine life therein. I do not agree to be a test subject.	To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062.
Pollitz	Please do not implement this plan. The western coast of the United States is one of the few fairly unpolluted ocean waters left in the world. The danger of pollution with this plan is a threat to all ocean animals. It also threatens peoples livelihoods and will ruin our tourism. The Beluga whales in Prince William Sound Alaska are so sensitive that their numbers are dwindling do to slight levels of pollution even though they are not hunted. So who knows what damage this plan will do? The salmon runs off the western coast are dismal. The water is warming and that threatens other endangered species like the sea otter and our whales. Please do not implement this plan and protect one of our greatest natural resources.	All water pollution concerns of Navy actions are handled in Section 3.4. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Poltz	I am writing to you to express my opposition to the use of California, Oregon, Washington and Idaho States as your test areas for Naval Warfare experiments, our people and most aggregious of all marine mammals in your anti-submarine warfare exercises, tying bombs and other devices to the backs of friendly sea creatures such as dolphins whom you befriend and teach to play games and perform tricks, you routinely abuse this trust.  Everything on this planet is not put here here for your pleasure and insane warfare plans. You routinely pollute our atmosphere with chemtrails altering the ecosystems of these four States and for what purpose????  How many more new bombs and weapons systems do you need to kill and conquer enemies that don't exist except in your warped minds.  I want you to put an end to this psychotic madness and come back to reality. Spend one day in our pristene forests, breathe the clean fresh air and smell what nature gives us before yu destroy it all and turn it into another eological hell like most of our inner cities.	This comment has been duly noted.  The use of marine mammals in underwater detection activities is not part of the proposed action of this EIS/OEIS.  Potential impacts from Navy activities were discussed within the Draft EIS/OEIS according to contemporary scientific standards. Contrails associated with military and commercial aircraft were not discussed within the Draft EIS/OEIS due to the absence of a nexus between activities and impacts.
Ponder-01	Plans for increasing air traffic out of Whidbey Island AFB, along with its attendant noise has just come to my attention.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is

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	I live on Lopez Island. We are currently enduring just about as much noise as we can stand, and the prospect of more is frankly unimaginable.  I registered a complaint with the AFB just last week, when the loudest jet noise I have ever heard caused my house to shake dramatically. It was practically deafening, and I could not have been heard by a person sitting right next to me even by shouting. I requested a call back from the officer in charge of complaints, but did not receive one.  As I write this, I am enduring a near constant roar of jets in the distance. I have lived here for 14 years. The jet noise, though intermittent, has been at its worst most recently. It already has a significant negative impact on the quality of life here, in this beautiful place. Please know that Lopez Island is a very vocal and active community. Most people have not yet been made aware of plans for increased traffic and noise from the Navy. Lopezians will likely "not go gently into that goodnight," in terms being quiet once this matter has been brought to their attention. Or, one might say, "It will not fly."  I so hope that my voice will be heard in this matter, and ask for your help in insuring that this plan does not go through. Thank you for your consideration. Sincerely,	not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Ponder-02	*(There is no "Organization of Concerned Residents of the San Juan Islands, but this electronic form has a REQUIRED field headed "Organization." Many individuals who are not connected to a specific organization may have been discouraged from commenting as a result.)  The following comment is specific to the impact of jet noise on the human population in the vicinity of Whidbey Island NAS.  While much attention has been given to the potential health impacts on marine and other wildlife, I am concerned that the NWT Range Environmental Impact Statement has not taken into account the effect of airborne sound on the mental health of humans living in areas near the Range Complex.  The Whidbey Island NAS has a sign posted at its entrance that reads, "Pardon Our Noise. It is the Sound of Freedom." That may be true. But it is not the whole truth. There are significant numbers of people for whom that noise also brings to mind images of war, and all its sadness, and all its horrors. Those kinds of associations increase in intensity in direct proportion to the volume, frequency and duration of the sound. Jet noise. Very loud jet noise.  Navy jets fly far and wide over the Salish Sea, well outside of the boundaries shown on Environmental Impact Statement maps. We are currently experiencing a period of increased activity. Residents of this area endure and expect to continue to endure this noise to a certain extent. But there must be a limit. And that limit falls somewhere below the point of actual hearing damage. And it seems to me that that limit has already been reached.	Please refer to the following section of the Draft EIS/OEIS for the environmental impacts on the resource listed below.  Section 3.5 Acoustic Environment  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Platforms may be changed but takeoffs and landings will not.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight

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	Please ensure that Whidbey Island Naval Air Station does not see increased testing and training resulting in increased jet noise as a result of the findings of the NWT Range Complex Environmental Impact Statement.  Thank you.  Angie Ponder	testing of unmanned aerial systems is proposed.
Ponder-03	Environmental impacts to some areas within the controlled airspace of NAS Whidbey Island have not been addressed in the EIS, as they are not technically within the Range Complex. No provision has been made for addressing the concerns of residents living in these areas, even though the implementation of either Alternative 1 or Alternative 2 would double the number of sorties flying in and out of NAS Whidbey. Increases in sorties will undoubtedly result in increased air traffic (more than 2,500 flights per year) and more noise from jets flying over San Juan County.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands
Ponder-04	San Juan County was not listed as an "interested party" in the EIS, and was not notified of these plans at any time during the process. There will be significant impacts to tourism and quality of life in this county with the proposed increases in Alternatives 1 and 2. Increased sonar testing, though legal, is unacceptable as range clearance procedures can not insure that wildlife will not be harmed. The Navy should be able to maintain "readiness" without further disturbance to the environment, the people, and the creatures who live here. Consequently, the "no action alternative" is the preferred alternative.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Pope-01	I'd like to vote against the plan. Thanks.	This comment has been duly noted.
Pope-02	I work at the Oregon Coast Aquarium. The peace and natural beauty of the area, and the safety of the species of the ocean is important to me and the people who work and live here. I object to the plan to increase sonar activity as well as training activities that could impact the wildlife in the area off our coast. It also would affect our livlihood.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Pope-03	If you did not think it would affect us why did you try to sneak this plan by with	To ensure the public has ample opportunity to comment, the comment

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	as little opportunity for public comment as possible? I find it a conflict of interest that your environmental impact statement doesn't come from an independant source. Please count my objection in with the others you are bound to recieve. Thank you.	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Porter, J.	I strongly object to increased frequency of military training from Whidbey NAS to Pacific Ocean because of the unbearable noise caused by the Prowlers and Orions as they are flown directly over and/or near Anacortes. Life (work, conversation, learning, teaching, sleep) absolutely come to a halt during these flights, day and night. Several years ago, we were promised the flight pattern would not be over the city - that promise has been broken; we were also promised the flights would not be late at night - another broken promise. These flights cannot continue without modification to mitigate the noise, much less become more frequent.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Porter, P01	I have requested, via a FOIA, information concerning EOD testing and training at Naval Magazine Indian Island, Port Hadlock WA. I understand that EOD testing took place in July of 2008 at the depot. I would like to know if observance by NOAA/NMFA was documented as it was at Whidbey Island when such training/testing was done. I was sent a CD of the NW Training Range Complex EIS by the Navy Region Northwest. It did not answer my question. I believe that this sort of training in Port Townsend Bay could not possibly comply to NEPA requirements and that in your assessment of impacts it was not addressed.	Freedom of Information Act (FOIA) requests are handled separately from the NEPA comment process.
Porter, P02	Attention:Kimberly KlerEnvironmental PlannerNavy Region NWSilverdale, WA Subject: Comment on the Extended Range omplex EIS/FEIS. I am a resident of Port Townsend, WA. I live across from Port Townsend Bay facility Naval Magazine Indian Island, Port Hadlock, WA. I do not believe that testing in Port Townsend Bay is compatible with a active tourist community with a steady flow of traffic in the bay by recreational boaters, ferries, and tourist events. Our community has expressed concerns about EOD training and testing in the bay as explosives would not only effect the quality of our environment but also the safety of our citizens. NAVMAG Indian Island is now the major west coast munitions location and with that	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS. Section 3.14. Impacts to commercial fishing have been analyzed within Section 3.7, Fish. With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All

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	comes security issues. I believe that limited training and testing would curtail some of the security concerns. Port Townsend is not like Bremerton, or Whidbey Island or even Bangor in that our citizens are living very to vast tonnages of munitions and quite a bit of activity with ships coming and going on a very regular basis. We do not have the infrastructure to handle an accident involving munitions. This needs to be addressed by the Navy. There will be a Hood Canal Bridge closure and this concerns me as the EOD teams come from Bangor. To sum up what I am trying to say, we need to curtail activities at the Island as much as possible not only for the protection of the environment but for the safetyof our citizens.Respectfully;Pat Porter Port Townsend, WA	health and safety issues are discussed within Section 3.16; Public Health and Safety.  As shown in Table 2.10 of the Draft EIS/OEIS, underwater detonations at the Indian Island EOD site will decrease from 4 per year to a maximum of 1 per year. There are no other training activities in Port Townsend Bay.
Porter, P03	Dear Kimberly Kler; I would like to know if my comment went through.  I sent it this morning but there was no indication that it was sent. Is there some way that you can confirm that you received it. Pat Porter	We received your comment.
Porter, P04	Kimberly Kler, Navy Environmental Planner; I have reviewed the Northwest Training Range Complex EIS and feel that Biological Assessments/information are completely inadaquate concerning NMPA and Endangered Species Act guidelines. Current training levels at Cresent Harbor, Whidbey Island and Naval Magazine Indian Island are in question as to the 'actual takes' and estimated 'take' by Navy testing and training of inert explosives. NOAA has documented the testing at Cresent Harbor which indicates that the effects of these 'explosions' are far more damageing then the Navy is indicating in the NWTRC EIS. The level of testing proposed by the EIS will cause detrimental impacts on the Orca population in the Puget Sound.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its effects.
Porter, P05	Increased Navy testing in Port Townsend Bay is not only an environmental concern but a safety hazard due to the proximity to Port Townsend proper. The community of Port Hadlock and Kala Point would be put at risk with expanded training and testing, while they are less then a mile from Crane Point. The No Action Alternative proposed does not address the existing problems with current training and testing levels. The NWTRC is too vast in size with unnecessary encroachments on coastal waterways with communities dependant on tourism and local fishing. The Navy needs to look at new environmentally friendly methods of training our military personal. Patricia Porter Port Townsend, WA	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.  Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.  This comment has been duly noted.
Porter, S	Dear Sir or Madam:  National security is important. But I am concerned that "national security" is, in some cases, used to justify almost anything no matter what the consequences - whether those be economic, environmental, etc. Is it really necessary to have a U.S. military training complex off the Oregon coast?  I respect and am grateful to those who serve in the U.S. military but ask that the U.S. military respect the living beings, and the Pacific ocean that is their	The Navy complies with all applicable environmental laws, including NEPA and its requirements. The purpose of this EIS/OEIS is a complete analysis of all environmental resources within the NWTRC; This comment has been duly noted.

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	habitat, who live in the ocean of the Oregon coast. Please assure the citizens of Oregon that your actions are ecologically as well as legal sound.  Thank you for your consideration.  Sincerely,  Sam Porter, Citizen, Eugene, Oregon, United States of America	
Pouillon	Iwould like to say that I am opposed to the Navy's continued use of high powered sonar in and around Puget Sound. I am also opposed to it's use in the open ocean where whales are known to travel,mate and feed. I don't believe that there use is necessary and needed for the continued security of the United States. How many of our enemies have the capability to attack us under water, and do they possess stealth capabilities to go undetected with our present technoligies? Please don't harm or kill the seas creatures because of some paranoid policies of a supposed threat.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, limitation of sonar training to areas outside of the Puget Sound, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062.
Powell, E.	Thank you for considering my concern over the Navy's use of the Pacific Coast for a training range. I am writing as a private citizen, though I live and have been Adjunct Faculty for SOCC for the last eight years. I am very concerned about the impact on the new marine reserves being established on our Oregon Coast. According to reports of Navy officials' responses at public meetings, which I was unable to attend, it appears you haven't fully taken into account impact of proposed training on these Reserves, Our communities depend on the interrelated ecology staying in balance. We're very proud of the interagency work meshed with private fishing families which has been successfully achieved on the Oregon Coast. Salmon yields, and others, are by no means secure. It would be terribly premature of the Navy to introduce another factor which could cause disruption in this fragile balance. Thank you for reconsidering your plans to allow for much more in depth study from those who will be most affected. Sincerely, E. Sandy Powell	This comment has been duly noted.  Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Powell, T.	This is an outrageous plan. Our Pacific coast is no place for your paranoid war games. The navy and the other branches of the War Department should be closing bases, dismantling weapons systems, and shifting all their activites to positive, constructive enterprises.  Go back and clean up your old messes, like unexploded bombs, landmines, and depleted Uranium contamination in Iraq, Afghanistan, Palestine, eastern Erope, and SE Asia. And while you are at it, destroy all the nuclear weapons and the missiles that go with them. It is time to make peace, not war!	This comment has been duly noted.

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Powers-01	I attended the Navy's presentation at Tillamook and learned quite a bit. I want to compliment the folks manning the info stations—they were knowledgeable and eager to answer my questions. I still do have several concerns;  1. Gray Whales: they are exposed to potential harm for a consideable portion of the year as they migrate South and North. I looked at Bruce Mate's recent study showing how close they migrate to the shore and the critical area extends from just within the three mile zone for females with calves and maybe out beyond the twelve mile boundary when they are migrating South. There are also some residents off the coast year round. I wonder if there happens to be a change in the migration pattern, {a little slower moving down one season,etc} how would you know this? Or maybe there are some whales in distress for some reason. Do you have real time communictaion with the Hatfield Marine center in Newport?  2. I'm also concerned about the effects of noise and demolotion on juvenile salmon as they migrate to the ocean. It would be a tragedy if we lost any species of salmon and they are teetering on the edge of survival as it is. The effects of your increased training, etc, may not have threatened a healthy, thriving population but I worry about even a small increase in "take" of the current population. How will you monitor your effects on salmon?  3. This week our neighborhood association is having a presentation by a power company which wants to test one of its wind turbines directly out from our community. The test site is one by six miles and after looking as some European wind parks I know that such energy parks take up a sizable chunk of ocean real estate. In addition, there are proposals for marine reserves off our coast and, I believe, two have been agreed to around Depoe Bay and further south. There may be more reserves in future. Both the reserves and energy parks pose hazards to navigation and perhaps pose other problems I'm not aware of yet. Are you coordination your plans with the folks plann	The Navy takes its responsibility seriously to serve as a good steward of the natural environment. The Navy demonstrates that commitment by investing millions of dollars annually in programs that minimize, and in some cases eliminate, the effects of activities on the environment while carrying out the ongoing national defense mission.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The full analysis of the effects of sonar and underwater detonations were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals). Concerns of salmon are handled in the Fish section; 3.8.  With regard to wind turbine activity- our Cumulative impacts chapter; Chapter 4, discusses all past, present, and reasonably forseeable actions that may add impats to the resources analyzed.  The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts to all resource areas.
Powers-02	Comment readers: Let us have all the chemicals you have full blast, via air, water and hell, even let us have it with high power energy rays, radio waves or partical beams; I simply do not give two hoots in hell if you kill off all the marine animals or if you manage to damage all of the environmentally	This comment has been duly noted.

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	challenged species on the planet, including all of the humans. You government folks want to fight over it, patrol it or safeguard all of our lands with military equipment, go right ahead, kill them all, including all the people, especially the Portland "wierdos" and the far less wider unknown subterranean species, including the ones with scales and even those cute slimy ones that eat humans for lunch. I could care less who survives and who "inherits" this planet; fire away! blow us all to hell for all I care. Bye Bye I will miss the pacific northwest golf courses and the sea food, but have you looked around lately at the pacific northwest women? for the most part, they look like a bunch of choker setters; ugly, with the short hair and bashed in faces; if you could wipe them out first that would be a nice gesture. You can explode all the ordinance you want and you can spread all kinds of crap in the air in an effort to control the climate, whether you want to cool down the planet or to heat the thing up, I simply do not care one twit. You can fire up the biggest HAARP and blow out our nervous systems or you can use super powerful underwater sonar to track ships on the other side of the planet, killing all the sea creatures completely. You have cart blanch permission to do what ever the hell you want to do as far as I am concerned. I simply do not give a crap about this plant or any of the people on it. Why, you ask yourself as you read this comment would someone be so brash as to suggest you just pull the trigger on this planet and all of the species that depend on it? This planet is not our home; never has been, never will be. If God wants a bunch of idiots or geniuses running things and killing us off so it can be over run by some other species, then that is fine with me. Our true home is in "heaven" and this miserable rock with it's cold and hot extremes can just be tossed into the sun for all I care. I will miss the red wines, especially the Bordeaux; that has been a real treat. http://en.wikipedia.org/wi	
	http://www.nhra.com/ But that's ok, you can blow us all to hell if you want; we trust that you know exactly what's best for all of us. Warren	
Pray	Re: fly overs on Lopez Island, I'm writing about the proposed increase of flyovers on Lopez Island. Please reconsider this area. Most of us who've moved to Lopez Island have done so to get away from the noise of the mainland. A someone very sensitive to the sounds of planes (an early trauma) and a pet owner who has to comfort my animals everytime there is a fly over, I implore you to consider other routes. Thanks for considering.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Prins	I have strong objections to the military moving ahead on this project. There seems to be insufficient information given to the public about the affects of this testing in the coastal areas and insufficient evidence that the the proposed expension of testing areas won't be harmful. to the environment and all living beings.	Effects of past, present and planned Navy activities have been discussed in Chapter 4; Cumulative Impacts.

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Pritchard	I realize the need to conduct testing and how advancements that are made due to this testing will continue to keep us safe in the future, but you must realize that this is not the place for such testing. We are situated in a unique corridor for marine and coastal life and this will be irreversibly altered due to your testing. Our fisheries are down and there are many species fighting for survival. We are all linked to the ocean and when it suffers we suffer, both economically and spiritually. There would be an increased cost, but I urge you to work with the scientific community and search out an alternative test site that is far removed from sensitive coastal marine environments. Far too often we as humans have chosen the quick and easy path and generations later have to pay the price for our lack of research. I implore you to not take this lightly and to NOT expand your Naval Training Complex.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Proie	It is completely unnecessary to kill marine mammals to practice warfare testing. Not only is it inhumane to torture and kill highly intelligent creatures such as marine mammals, but it also a disturbance to the natural ocean environment and all the people living off the coasts nearby. In this day and age there are other more conservative ways to test things than by using innocent animals. If this training programs is allowed to take place I will be ashamed to call myself an American.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Prout	Hello, I am greatly concerned about the potential increase of air noise over our small rural island, Lopez Island in the San Juans. We already experience much more loud jet noise- often from low- flying jets-than ever before. I have two small infants who wake and cry at every jet passing overhead. It is distressing on so many levels. Please do everything that you can to decrease the sound of your jets. I do not see the need for an increased air tragic of this nature. I appreciate your attention to my comments. Sincerely, Abigail	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Quentin	I am a resident of Fort Bragg, Ca in Mendocino County. Last week, I heard a news broadcast outlining the Navy's plans for sonar and weapons testing off the west coast. This was the first newscast I've heard on this issue. I am strongly opposed to such testing because of the negative impact such testing will have on the marine environment. It is completely unacceptable that testing will kill or negatively impact over 130,000 marine mammals annually. I understand a public forum with the Mendocino County Board of Supervisors is taking place today at 4 p.m. in Ukiah, CA. Since Ukiah is far removed from the coastal area (approximately 1 1/2 hours' drive inland from Ft. Bragg), it is imperative that a community forum be held in Ft. Bragg (preferably in the evening, since most of us work).  A healthy marine environment is essential to the economy of Fort Bragg. Since the demise of commercial fishing several years ago, Fort Bragg's economy relies heavily on marine based tourism. As you know, sound pollution from Navy testing has major adverse effects on marine mammals	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  The Navy determined public hearings locations based on areas with most potential impacts from the Navy's proposed actions and population centers in those areas. Because Mendocino County lies outside of the range complex, meetings (and notification) south of Humboldt County were not considered.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals,
	and their ability to migrate, mate and socialize. Without marine mammals, specifically whales, our tourist based economy would suffer greatly.	there is little relative risk to marine mammal populations from mid- frequency active sonar training exercises. The use of marine mammals in

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	I sincerely hope the Navy will extend the time period for public comment before testing begins and will send a representative to Fort Bragg, CA so that our questions can be answered. Again, I am strongly opposed to Navy testing off the west coast of the U.S.	underwater detection activities is not part of the proposed action of this EIS/OEIS. The U.S. Navy complies with allI regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
		Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
		The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.
Rackowski	using sonar and underwater firing in any inland waters should be prohibited using sonar and underwater firing should be excluded from areas where whales, dolphins and other hearing and vibration sensitive species like salmon and steethead exist	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Rasmussen-01	I am opposed to your plans for training in Puget Sound. The no action alternative is the only one acceptable.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Rasmussen-02	Southern Resident Orcas are endangered species and cannot be threatened in this way. They use sonar to locate fish and each other. Your sonar blasts can kill or confuse them.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training
Rasmussen-03	We do not want any DU in Puget Sound. It is almost dead from abuse already.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's

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		Proposed Action.
Rasmussen-04	Plus, we want peace - the Navy is no longer needed.	This comment has been duly noted.
Rausch	Please stop the further expansion of the Northwest Training Range that will further jeopardize marine and human life and contaminate our air, water, and soils with the chemicals used in these programs. I have a farm where I raise food to feed my family, and I do not want to have that exposed to metals or chemicals associated with military operations. Deeply Concerned, Nathan Rausch Renton, WA From:  Date: March 1, 2009 3:56:24 PM PST http://www.breskin.com/navy_eis_letter.htm Date: Thursday, February 26, 2009, 1:00 AM Warning to the Western States: You Are About to Be Used for Target Practice Pentagon Plans Massive Environmental Impact on Puget Sound in More Ways Than One! For more information and copy of the U.S. Navy Environmental Impact Statement (EIS) http://www.nwtrangecomplexeis.com/GetInvolved.aspx. Comment Form. http://www.nwtrangecomplexeis.com/EIS.aspx	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.  Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Ray, A,	We the citizens of northern California strongly appose the use of our ocean and air space for Military testing and war games. We believe the draft EIR to be incomplete in that it does not disclose a full list of substances, toxic or not, to be tested. Neither does it contain an impact study on the ecosystems, on land and along our coast etc. Furthermore, we are outraged at the prospect of Militery meneuvers being caried out in and on a civilian population, especially here in our own country. If the Military of this country insists on persuing this type of blatant abuse of power as it exploits the public trust. We are trully defeated as a democracy. Sincerely, Alex Ray	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Ray, D.	Anchors Aweigh! It's good that the Navy is being such a "good neighbor." I only hope that a sufficient portion of the population realizes the need - and benefit to them - of the Navy being able to provides it military personnel with the best possible training. The Navy has been an important part of my life, first in 1933 when I was born into the family of an Annapolis graduate (class of '25), later when he survived Midway on the Yorktown, and still later in Korea, where we both served independently. In 1952, I experienced just a few hours of dropping depth charges from a DE, off the Washington coast - on our way to Juneau, Alaska. Keep up the good work.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Raybee	I am strongly opposed to any weapons testing off the shore of California or anyplace else! There are more than enough weapons in existence to kill us all. It is time for diplomacy, sharing food and other resources to the benefit of all and ending warfare. The funds being spent on this destructive, unhealthy experiment could be better spent on schools and developing alternative energy.	This comment has been duly noted.
Raymond, Amelia	Through March the whales pass close by Mendocino on their northward migration. People flock here to see these magnificent animals, which feed	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of

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	upon a layer of plankton and microscopic sealife on the ocean floor. Brenda Peterson, a biologist, writes in her book "Soundings" that whales hear through their bones, so the whale's bones have the sensitivity of an eardrum. One can hardly imagine the impact of sonar and weapons blasting anywhere near them. They are impacted despite the many miles the sound travels. Please test far from the whales' migration routes.	injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Raymond, Amy	I need to be quick here because I work full time so please excuse my rushed tone. That said I am writing to express my deepest concerns and opposition to proposed SONAR and underwater explosioins being proposed near protected marine sanctuaries off of Washington State's coast. I am not in favor of any bomb testing generally, it makes my feel LESS safe in my own country. However, we should do everything we can do leave marine life out of our military excapades and practices. research has shown that all animal life needs is sizeable and safe habitat to thrive. We owe animal life this simple need and our military excercises should not EVER interfere with marine/wildlife.  Thank you for your strongest consideration of this matter	This comment has been duly noted. This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its effects.
Rayne	As a resident of a coastal community, and as a citizen concerned with the long term security of our nation, and our world, including our natural environment, I deeply and strongly object to the Navy expanding it's training and combat exercises down the coast. I object to the interference with the natural eco-system, and the disruption of civilian use of these areas.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Reardon-01	The public hearing in Oak Harbor would have been better for me if the comments at the front of the room came first, alerting me to the concerns of the "environmentalists", so that the 2nd half would be available to go around to the informational tables and folks with our more knowledgable questions. It is clear that, in the current format, the Navy has lots of resources for display, printing and video to present information and presents it first which tends to outshine any other point of view.	This comment has been duly noted.
Reardon-02	Repeat comment with required field of "Organization" It would have been better for me at the Oak Harbor meeting if the public comments had come before the hour and a half of time for getting more information from displays and one-on-one questions. I needed first to hear the concerns of the "environmentalists" or those citizens who had read the EIS (I did not) before I could formulate good questions. The initial display and info tables clearly had the Navy's very large resources behind them (printing, video, etc.) and this all outshined any other point of view.	This comment has been duly noted.
Reardon-03	The Navy's protective measures for sea life were good to hear. I am no expert in marine mammals, but do know that dolphins and whales are very quick to learn. In addition, to standing watches, etc. to spot nearby mammals, it would seem that some sort of non-harmful warning sound before any loud sounds could alert mammals to leave the area. This kind of social learning	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.

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	could quickly spread in groups like orca pods.	Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise. Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Reardon-04	By the end of the EIS meeting in Oak Harbor, I'd become a bit cynical of the process. (I also understand that some aspects of the meeting may be mandated by EIS rules.)  The presentations were very well-done by both the Navy (and appeared quite expensive) and citizens. However, citizens kept saying "I vote no action alternative" at the end of their remarks, and the impression of voting was let stand.  It would have helped if the ground rules had been clearer that there was no voting involved here and that the Navy would not be answering any questions. Ground rules about everything else (time allowed, etc.) so why not clarify the bigger picture.  I was left with the suspicion that citizen input might be used only to beef up the Navy's presentation of actions it was pretty committed to. I was left with questions about what new equipment had already been contracted for that needed to be tested.	This is a decision that will be made by the Secretary of the Navy upon conclusion of the NEPA process for the NWTRC. This decision will take into account all factors from Navy training to environmental concerns.
Reardon-05	Final comment from me: Thousands of dollars are being spent in the northwest to improve and maintain salmon runs, a critical and endangered part of the natural foodchain. Why would we then spend money making changes that clearly increases risk to these same salmon runs? The comment version of that question is: It makes no sense to me to spend money making changes that clearly increases risk to these same salmon runs.  Thanks for extending the comment period and encouraging dialog on these issues.	The text of the Final EIS/OEIS now includes standard Navy conservation measures to avoid eelgrass and kelp beds during EOD activities and to include the findings of the NMFS Biological Opinion indicating no impacts to salmonid habitat areas.
Redick	It looks to me as though the Navy has worked to make any damage to the environment as minimal as possible. We NEED to remain ready to protect our country and should support the training range here.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Reed	I just found out about this range training you plan to do and now realize that the navy is doing a run around the public to blindside us. First Nevada and now us. So many of us have thyroid and cancer issues from previous testing and now you want to add to the health endangering soup. I implore you to	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.

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	reconsider this. There will a heavy price to the navy and us to pay if this precedes ahead. You will reap what you sow.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		Please refer to the following section of the Draft EIS/OEIS for the environmental impacts on the resource listed below. Section 3.16 Public Safety
Reeve	We would appreciate attention to the impact that such loud and frequent noise from flights causes to the quality of our life, our health, and to the that of our livestock. We realize and accept the need for training flights in and around Lopez, Washington. But we ask that such flights be minimized as the noise impact is significant and startling. Flight patterns that maintain restricted height and are far off shore lessen the noise. But the nearshore and overland flights, and especially those at low elevations, are extremely loud and frightening. At times one's body rattles with the sound from the flights. Usually the loud sound is abrupt due to the direction change. This is especially harmful to livestock as this causes them to startle. Earlier this winter we did have a horse injured as she jumped at the extremely loud and aburpt sound and hurt herself as she bolted. Fortunately, the humans were a few feet back from her and did not get injured by her reaction to the flight sound. We have seen this type of startle reaction by the livestock many times as a response to the intense level of noise and the shock from the low, overhead flight.  We also have concern regarding marine mammals since a couple of years ago when the dead harbor porpoise washed up after sonar exercises in Haro Straits. The animal did not rot. It 'leathered'. No eagles or vultures were interested in it. It was not a usual marine mammal death.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Reeves	Please do not go through with your current plans, you have not done your homework. We rely on you to keep us safe, and this plan will not keep us safe if we don't live and protect a "healthy" life style.	This comment has been duly noted.
Regan-01-	The proposal to expand navy training exercises in the state of Washington is alarming. We have a situation of declining marine species in our waters and do not need more sonar threatening our existing population of orcas which are already endangered.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.

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Regan-02	We also do not need more deadly substances polluting our waters, such as uranium which is also a real threat to the marine population and our species since we consume fish from our waters.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
		All water pollution concerns of Navy actions are handled in Section 3.4.
Regan-03	Our town and many others in the NW are frequently bombarded with the naval airforce jets which are extremely loud and often fly so close that they shake our houses. I am against more of this action because of increased noise pollution, and especially since accidents happen when young men have both speed and ego in their court. Remember the 2 or 3 crashes which happened in San Diego several years ago. The level of navy presence in our state is more than enough in my opinion. I am requesting that this decision be delayed until enough study has been carried out to determine the deleterious effects of increasing its presence, on both marine populations and human populations. Sincerely	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.  This comment has been duly noted.
Reid, D.	When are we going to do the RIGHT thing!! Don't you dare poison our ocean with weapons and sonar!! I'm disgusted with all the injustice and cruelty. The human race will never evolve if we keep waging war instead of peace and if we keep poisoning our oceans. It just amazes me that there are people who even think this stuff up!	This comment has been duly noted.
Reid, J.	Do NOT do this please. Make this more public and allow comments. Thanks	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.
Reiff	Our livelihood depends upon the health of local marine whales and wildlife. We can not afford a disturbance of this magnitude.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Renison	I ask that the public comment period be extended to study this complex document and its ramifications. The EIS appears to be incomplete in regards to air quality, water quality, and soils impacts. If the study is not able to be further investigated, the option "No Action Alternative" is preferred.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all
		relevant facts and impact analyses.
Renninger	As a concerned resident of the Puget Sound area, I'm writing to share my hopes for the future of the Sound. I am worried that your perception of the Sound as a trainging space and as a resource for battle practice will make it	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource

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	easy for you to forget it is also an environment and the home of many valued sea residents. I am also concerned that your knowledge of the state of the sound and it's compromised pH is an exscuse for you to continue the deconstruction of it's fragile state. As an example of those sort of actions I'd like to reference an untended childrens bathroom with toilet paper on the floor. Just because a space is abused does not mean additional abuse will go unnoticed. Less responsible persons will consider their actions negated and add to a mess instead of adopt responsibilities to pick up the slack of others. Your intentions to prepare your men and women for conflict within peaceful area is also concerning. There is no conflict here, but you're implying there is. I wish I could say your presence would make me feel safe, but the implication that your presence is needed is the only thing making me feel unsafe. I appreciate your time and hope that I have said something worthwhile. I do not mean to discourage your practices only encourage you to be accountable for them, and value the things what we have to protect. Sincerely, Charlotte Renninger	areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Resch	I am responding to the Navy's plans to increase training in the Oregon coastal waters.  First: There is little transparency of information for the public, little media exposure for the public to respond. This is reprehensible!  Second: Many kinds of whales live in an pass through these waters some of them endangered species. Military and other sonar endanger the natural sonar of these mammal who depend on this form of communication for their survival. I protest the Navy's increase of training in these waters.  Third: Under water training detonations similarly radically disturb the natural ecology of the ocean: fish and plant with dire implications for maintaining the health of our ocean. I protest the Navy's on training in these waters.  Ruth Codier Resch, Ph.D.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Rhea	Dear Sirs at United States Navy:  Please consider halting the sonar research and exercises involving (affecting) the whales and the dolphins and any other marine species that can hear these frenquencies. We, the humans, would not want high decible and repetitive soundwaves directed at us, ourselves. The whale beachings can be attributed to these naval excercies (i. e. they cannot take the unending tortuous sounds so they commit suicide). Please consider halting the sonar exercises.  Thank you.  Thank you.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Rice	I strongly oppose the use of our coast waters for Navy Training Complex	This comment has been duly noted.

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	activities! These training activities, including sonar and test explosions, would cause irreversible damages to precious oceanic wildlife.	
Richards, C.	WTF	This comment has been duly noted.
Richards, J.	I couldn't help but notice how poorly noticed, obscure and limited this review process is. Thanks for the electronic opportunity!  I strongly oppose rules, issued by the Bush Administration in its final days, that would allow the Navy to harass or injure marine mammals more than 10 million times during naval training with mid-frequency active sonar.  I urge your agency and NOAA Fisheries, which is under your authority, to review and reissue the three rules authorizing the Navy to take marine mammals in its Hawaii Range Complex ("Hawaii") and Southern California Range Complex ("SOCAL"), and during Atlantic Fleet Active Sonar Training ("AFAST") along the entire east coast of the United States.  In issuing these rules, the Fisheries Service relied on the Navy's faulty estimations of harm, and did not meaningfully analyze the cumulative impacts of millions of sonar exposures on populations of marine mammals. In addition, the Fisheries Service did not impose adequate protections for marine mammals as required by the Marine Mammal Protection Act. It is critical that you adopt effective safeguards for marine life, given the extensive, long-term environmental impacts of the Navy's sonar training.  For these reasons, I urge you to reissue the AFAST, SOCAL and Hawaii rules after properly analyzing take estimates, accounting for cumulative impacts, and imposing meaningful safeguards for marine mammals.  I know that good science and environmental protection are hallmarks of the new administration. Please make sure the Navy upholds our environmental laws and protects marine mammals.	The Navy has complied with all NEPA notification. The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. Record of these scoping meetings is included in Appendix F.  Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.  Reflecting the quickly evolving science in the study of effects on marine mammals and other marine species, this Draft EIS/OEIS uses a different methodology than was used in previous studies. This methodology, developed jointly by the Navy and the National Marine Fisheries Service, appears to more accurately depict the probability of a response to midfrequency active sonar and other activities effects. See Section 3.9 for a more complete discussion on sonar and its effects.
Richardson	Stop trying to kill us, we pay your taxes and your salary stop trying to kill us with your weapons testing here in the NW we don't want you here to begin with stop killing everything to keep me "safe" who will save me from you?	This comment has been duly noted.
Richoux	I support the "no action alternative" (maintaining existing training levels) in regards to the expansions planned by the Navy for its Northwest Training Range Complex. As a citizen of Port Townsend, Washington, mother, volunteer in environmental concerns, I consider this a threat to our efforts to make Puget Sound cleaner and safer for our wild orcas and many other sealife creatures. Protecting the environment is not secondary to testing weapons!	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Riehle	Dear Navy, My family and friends who are vets are appalled, as am I. Weapons testing on Vieques, PR and the Hawaiian island have been seriously destructive. Do not consider using the ocean along the PNW coast for "training" purposes; the environmental and homeland security consequences would result in irreparable, unacceptable damage to our peace and our threatened marine life.	This comment has been duly noted.

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Rifkin	Please leave our coast alone, the way god made it to be. Think of the animals you will be killing, the habitat you will be killing, our sense of safety you will be killing. Do not destroy our environment anymore. Karen Rifkin	This comment has been duly noted.
Ringer	I oppose preferred alternative in the draft Environmental Impact Statement to expand training areas off the Pacific Northwest Coast, including coastal waters in Oregon. Instead, I believe the socioeconomic and ecological costs significantly outweigh the security benefits alleged.  This is a region of incredible biodiversity already stressed and threatened by inappropriate human activity. We can tolerate no further loss.  As an environmental planner and educator, and a grandparent who cares deeply about the world we leave our children, I encourage the U.S. Navy to redraft this EIS and eliminate any use areas that would impact, either	This comment has been duly noted.
	qualitatively or quanitatively, marine wildlife, including but not limited to terrestrial and ocean habitats and migratory routes.  We can do better than the current assessment presumes.	
Rippey-01	Navy I understand the need for training. It is imperative that training be made available to navy troops both for the country's protection and for the safety of the troops themselves. However, I am extremely suspicious of a process that seems to try to circumvent the established protocols every step of the way. First and foremost, the land that we all "protect" as our nation includes the physical environment inhabited by ALL of us, whales, tuna, salmon et.al. included. These creatures are under your protection too. Why is it that you have waited until the last minute to inform the public about this EIS? Meetings held elsewhere do not accommodate the local coastal interests. Why so little information and why so late? The newspapers along the North Oregon Coast were only able to give their readership 1-day's warning about the Tillamook meeting in February. The National Environmental Policy Act, requires government agencies to review projects that might harm the environment and propose reasonable protective measures.	The Navy has complied with all NEPA notification requirements. The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. A summary of these scoping meetings is included in Appendix F of the Draft EIS/OEIS.  Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Rippey-02	Why does it feel like you are swimming against the current on these issues? The local fisheries are extremely delicate and prone to disruption all along the Oregon coast. For now and into the future we will be increasingly dependent on this fragile resource both for food and for tourism. Navy underwater sonar	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.

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	blasts, bombs and missles have the potential to disrupt many of the various populations of fish and their feed. Whales that pass through here on their north and south migrations are also extremely sensitive to sonar blasts as has been acknowledged by the Navy. These migrations are of interest to tourists from all over the world and provide the area with some economic support. Before we know it, we will have destroyed all that we purport to be protecting. Sincerely, Barbara Rippey	The Draft EIS/OEIS described potential economic impacts to fishing in Section 3.14.2. In this section, the analysis concluded that impacts would not be significant due to advanced public notification and primarily short-term duration of military activities. No new closure or restricted areas are proposed.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Ritter	Hello Base Commander: [] I am a very strong supporter of a powerful and well trained defence force for our nation. [] I am retired from the National Park Service and my last assignment was Superintendent of Sequoia/Kings Canyon Nationa Parks in California. My position for many years was the "Base Commander of the Sequoia/Kings Canyon [] I have lived on Orcas Island for many years and enjoy the calm and tranquility of my retired life. [] Please provide specific information about any current and potenital training activity of your Growlers and Prowlers over or near Orcas Island. [] You are required to respond with specific information to this request. [] Please do not provide information about the need for "training opportunites" and "training environment" You prompt response is requested within ten days. Thank you for providing accurate and compete information. My experience at Sequoia/Kings Canyon National Parks involved direct meeting and reasonable agreements with Edwards AFB, China Lake and Lemore NAS. Please contact me at: Thomas Ritter	This comment has been duly noted. The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Roberts	NO, NO, and NO!!!!!!! On this particular project in the upper Northwest! Can't you people do your testing in international waters? It's only a few more miles out and much more realistic!  I know you are already submarine testing in So. Calif waters and damaging marine life and especially whales!!! Move your testing out of natural established migration, birthing and feeding habitat!!!!!  Put wind turbine in international waters as well, this would be at the horizon and not seriouly blocking the scenic corridors of the coastline!!!!! Move the international shipping lane out about 5 miles and NO offshore drilling for oileveryone know oil and water do NOT mix!  see why whales, dolphins etc. are so important!  www.petlanekidsartois.mysite.com, edna	Sonar training is not performed within the Puget sound but rather, it is performed offshore in the range OPAREAs.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Wind turbines and offshore drilling are not part of the Navy's proposed action

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Robin	We must not use the coastal waters of the Pacific Northwest as training grounds for warfare. First, the oceans are not empty - they are home to ancient and endangered species. Second, warfare in the nuclear age on an overcrowded planet in dire financial straights that is already in overshoot (consuming more each year than can be regenerated) is insanity - we do not have the natural, human or financial resources, and spending vast quantities to prepare for wars too expensive to wage is pure folly. To do so and destroy the basis of life for other species at the same time is actually immoral. Third, there are so many peaceful uses of these waters - for recreation, contemplation, sport - and we'd compromise all these sources of joy if we were to in any way pollute through noise or poison or accidents these precious waters. Please, no sonar or violent underwater explosions. What earthly reason would justify such destruction? Really?	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  This comment has been duly noted.
Rodden-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Rodden-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 2.4.1.1.
Rodden-03	3) The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Rodden-04	4) It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.
		To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended

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		items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Rodden-05	5) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Rodden-06	6) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
	review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Rodden-07	7) Other points I feel need addressing are these: There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Rodden-08	8) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Rodden-09	9) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Rodden-10	10) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.

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Rodman-01	1) To the U.S. Navy Training Range Complex, I have read the information regarding the proposed increase in increasing sonar testing and underwater explosions and also consulted with several doctors regarding these, the local ecosystems, and "depleted" uranium; cancer is already significantly on the rise on this island. Human fetuses are harmed with sonaras well as the damage or destruction to almost all marine life and marine life including salmon as well as whales, porpoises and others are required for human ecosystem here. Please have a human response and remove this testing in favor of the health and livelihoods of your future children and children of the NW whose ecosystem is being irreparably harmed for no benefit that could outweigh the harm being done to generations of children and families as the fishing and marine life degenerates and disappear because of testing. I spent many decades in Fortune 500 companies and had to look often at the cost of doing business; when it harms future generations there is no profit in it, and I feel much less "secure" with a Navy that harms the children and marine life where I am, as that judgment would no doubt be reflected in any defense of me. Please stop the price is simply too high to pay and we may not have time	This comment has been duly noted.
Rodman-02	2) Stop both sonar testing and underwater explosions. And if you cannot stop them completely at least take the "No Action Alternative." In my understanding of what you have posted, I want to oppose the following:	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Rodman-03	a) the Navy's testing of depleted uranium weapons anywhere on earth;	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Rodman-04	b) the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them;	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Rodman-05	c) invasive testing of any kind in an underwater sanctuary;	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Rodman-06	d) testing of any kind without independent research on potential environmental impacts; and	The Navy complies with all applicable environmental laws, including NEPA and its requirements. The Navy has complied with all NEPA notification requirements. Many of the Navy's actions undergo independent review by other regulatory agencies. As part of the permitting

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		process these agencies conduct independent reviews of the Navy's actions. In addition, citizens such as yourself provide comments during public commenting periods.
Rodman-07	e) all testing without viable citizen oversight of environmental compliance.	The Navy complies with all applicable environmental laws, including NEPA and its requirements. The Navy has complied with all NEPA notification requirements. Many of the Navy's actions undergo independent review by other regulatory agencies. As part of the permitting process these agencies conduct independent reviews of the Navy's actions. In addition, citizens such as yourself provide comments during public commenting periods.
Rodman-08	3) When ANY testing destroys American life and wildlife, how can this protect us and make us safer? Trust in those who are sworn to protect us?	This comment has been duly noted.
Rodman-09	4) I would like to be safe for generations more and have plenty to eat and healthy food for the children here which must include healthy marine life and unpolluted waters. Every sign that it is time for change in these practices is there. I oppose any destructive action even if it is called "testing," when it makes us any less safe and pollutes and destroys the food systems upon which we depend in our country. I know that this is not your intent, but what will you tell the future generations of children when the effects already being felt are multiplied many times over. If you're going to be part of something like the Navy then there begins to need to be new pride in what "protection" means for all of us. Many thanks for your willingness to risk life and limb to protect us, and I hope that together we can all find ways for your efforts to make us safer and first, do no harm.  Sandra Rodman CEO Parallel Universe & Right Brain Aerobics	We understand your concerns, however, this request for comments by the Navy is for the purpose of asking the public for concerns with the NWTRC EIS/OEIS document. This comment has been duly noted.
Rodriques	Please do not spray and test chemicals like white phosphorus over California. It is a violation of our health and environment. I urge you to stop.	White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Roesler	Strongly object to additional and louder planes. there is already supposed to be an overflight ban and it is regularly ignored. we hear jets here on the north end of the island all the time- and not just in a distance. I flew in the Navy years ago. I know what it takes, and how dedicated the men are, but I also know that they are young, not always paying attention to the people down below who have to listen to them and that flying is the best rush there is. For them its great, for us on the ground who have to pay for it and listen to it, its not!@!!!!! You cannot convince me that all the flights we now have are necessary. Doubling that is unwarranted, undesireable and a serious negative intrusion into the character and lifestyle of this pristine area. Thank you Bill Roesler Lopez resident	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Rohan-01	I support the No Action Alternative, until more information is gathered regarding the impact of this weapons systems testing on the endangered and declining marine life that inhabit the water in the proposed testing area.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.

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Rohan-02	I also would like the public comment period extended since there has been inadequate advertising of this proposal. Thank you.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Rolland	Do not allow the navy to use sonar that disrupts orcas and other marine mammals. this proposal requires much more study which i think will show its flaws.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Romney	I am opposed to any increase in the number of flights occurring into or out of NASWhidbey Island. The current number of flights is already disruptive to local citizens and various other species. Noise pollution is a significant stressor that contributes to all variety of health problems. Flights are noisy, sometimes painfully so, and already occur at all hours of day and night, sometimes in a barrage that seems intended to disturb people's lives. Adding more flights to this already-high stress load would be in contradiction to all that we know about the requirements for a healthy living environment.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Root-01	Addition to comments: I recommend that you choose the No-Action Alternative. In the meantime, more research is needed on the effects on marine mammals whose hearing is impaired.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Root-02	The simple additional mitigation measuretiming and planning all trainings to avoid times and areas of known concentrations of marine mammalsis not offered by the EIS.	The mitigation measures described in the comment are discussed in Chapter 5 of the Draft EIS/OEIS. Numerous mitigation measures are used by the Navy during every sonar training event.  Some restrictions on Navy sonar use have been considered by the Navy,
		but eliminated as described in Section 5.2.1.5 of the Draft EIS/OEIS.
Root-03	As well, appropriate NEPA "reasonable alternatives" analyses have not been provided in the EIS for the proposed increased kinds and numbers of range events. Such alternative analyses as are presented are too limited.	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The

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		broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Root-04	Biologically important areas, places where, for example, whales migrate and areas where marine mammals gather to forage need to be specifically excluded from all training. Impact assessment on the use of sonabouys needs to address the fact that by the proposed increase in use and numbers of mid-frequency active (MFA) sonar, their effects are cumulative with the incread ambient ocean noise level. These combined noise levels can cause death in marine mammals. Note: ambient ocean noise has already increased ten times in the 2280 Hz range, and doubled at the 100 Hz level in the last 33 years (Andrews et al, 2002). Since ASW activities have taken place for decades, even a no-change in the frequency and intensity of training represents an increase in ocean noise level. Level B harassment (behavior changes and temporary hearing loss) can result in marine mammal deaths (NMFS 2007 Biological Opinion on Effects of Composite Training Unit Exercises, etc). By impairing foraging, causing physiological disruption, reducing ability to detect predators, increasing stress, and compromising the ability to communicate, the changes caused by impaired hearing to marine mammals can lead to death.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Rose	I do not want the U.S. Navy doing training off the coast of Mendocino county because of the possible side effect of their use of sonar on the sea life here. thank you J.R.Rose	The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Rosen	I am writing to register my objections to the Navy's plan to use the West coast as a training range. Thank you for your consideration.	This comment has been duly noted.
Ross, A.M.	Stop it! Stop it! I'm sure there are much less fertile waters you could practice in. Why here?	This comment has been duly noted.
Ross, C.	The list is too long and others are more eloquent in pointing out all the reasons to not expand the training range. Please put me down on record as being adamant that increasing military presence only increases threats to humans, other living creatures and the the quality of life on this planet. Time to trim the budget and territory, not increase. Thank you for your consideration.	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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Ross, M.	You should never expose these highly intelligent, not to mention endangered marine mammals to the horrible pain and disorientation of sonar. It's using military grade sound weapons on them and messes up their sense of direction leading to beaching. It can even kill and cause brain bleeding in small cetaceans. Can't you find somewhere more remote to test your sonar? It's bad enough this wildlife has to endure the noise of numerous small craft and ship engines on a regular basis. Thank you, please help out the animals	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Ross, R.	The idea of the Navy using live ammo and doing major exercises off our coast is terrible. Terrible for the local and ocean environment, terrible for quality of life on the coast, terrible for business. You folks seem to think that might makes right. An historically discredited idea. Scrap the plan.	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA through the analysis of all resource areas. The Navy is not conducting major exercises in the NWTRC. The purpose of this EIS/OEIS is a complete analysis of all environmental resources within the NWTRC/
Rotchford	There has not been enough research into the effect of the Navy's proposed manoeuvers, and why haven't they been more publicized?	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Roy	No to the Navy's Warfare Testing Program. Don't you guys have a conscience?	This comment has been duly noted.
Roys	Traitors of this once great nation: You will be cast into the lake of fire with your father, Satan.	This comment has been duly noted.
Rumford	Please don't test underwater mid-level sonar in the Pacific NW. I mean, talk about bad karma; inflicting needless suffering on the world is wrong. I value the lives of the animals that live here among us. They shouldn't have their lives compromised or endangered. A healthy ecosystem is essential to our survival as a species as well.	This comment has been duly noted.
Rusch	As a resident of Whidbey Island for 20 years, and a US citizen, more importantly, I find it abhorent and ridiculous that the US Navy has requested	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing

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	access to all West Coast, and inland coastal waters for weapons testing. I can only describe this as an extraordinary lack of discipline in an organization to justify the broader environment as a free-fire zone. Weapons debris, depleted uranium residue and marine life destruction will be ignored according to this plan. Coastal civilian locales will become naval jurisdictions. The expansion of naval power and weaponry for no clearly mandated purpose does not make us safer. It threatens us all. Moving this threat to an urban/suburban aquatic environment only more clearly expresses the Navy's callous disregard for common sense and public safety, as well and reiterating the Navy's sorry record on environmental damage and abuse.	millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Rush	Please stop the insanity!!! Now is the time to be focusing on sustainability and helping make the world environment better. I would like to see efforts for improving the lives of communities through peaceful cooperation.  Testing new weapon systems on the American public is the wrong direction!!! It sends a message of destruction and disregard for humanity and our delicate ecosystems.  We need to set more productive and positive examples for the world community. Let us rise above the war games and participate in creating peaceful society. Focus on where we would like to be, rather than sinking into perpetuating the past.	This comment has been duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Russell	Please do not do any testing in any area of the earth's oceans that would torture and kill mammals sensitive to the percussion of underwater bombs, weapons, sonar, sonic, etc. Do not do anything to water mammals that you would not do to yourself or your loved ones.  Thank you, Janet Russell	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating

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		broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Ryan	As a resident of south Lopez Island, I am absolutely opposed to your proposed preferred alternative to INCREASE levels of air traffic to and from the Training Range mapped. The noise of current flights out of Whidbey NAS is shattering to residents of this rural, noise-free island, who sought quiet when selecting this island for their homes. An increase in flights will affect the health and mental stability of the Human species residing within range of the excessive noise generated by these flights.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
S.	Please reconsider your exercises!!!!! Hundreds of species will be injured and/or killed during your training processes, including sonar and other pollutants. Think of the wildlife that is a part of the chain of life. If we lose our sea mammals and other wildlife we are in great danger as a species. Thank you for your understanding. MOVE YOUR TRAINING AREA OR DON"T DO IT AT ALL! NO MORE WHALES, DOLPHINS, AND OTHER SEA LIFE DESERVE TO DIE!	This comment has been duly noted.
Saeji-01	I have lived on the South End of Lopez on and off since I was born in 1972. The noise level for Whidbey has always been easily detectable, often irritating, and will even wake guests up in the middle of the night since they're not used to it. Any increase would be unbearable. Just because this area is not highly populated does not mean you can just use it as your own private playground without regard for others. Do NOT increase your training flights.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Saeji-02	I am categorically opposed to the expanded training program proposed. Please do not do things that affect MY LIFE for reasons that I do not condone. No increased flights, toxic chemical testing, sonar testing or anything else. This is MY WORLD too, not just yours.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Sager - Evanson	we are feeling the pain of the sound bombardment we are feeling the connection to the beings in the ocean	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all

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	please stop the sounds, the testing, and believe us- it is agony. it is time for peace, and no more harm	relevant facts and impact analyses.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
Salerno-01	Dear Decision Makers, I urge you to choose the no Action Alternative as I am concerned about the decline in numerous marine species in our local waters.  Please follow prudent measures and conduct research on the seasonal presence of marine fish, birds and mammals found within their training ranges rather than rely on outdated surveys.	An independent study was prepared in 2007 at the commencement of the EIS project to determine accurate marine mammal densities for the area of the Northwest Training Range Complex. (ManTech-SRS Technologies. 2007. Final Marine Mammal and Sea Turtle Density Estimates for the Pacific Northwest Study Area.)
Salerno-02	Please follow the directives of our President and provide the public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations.  Thank you for stepping up to Saving Puget Sound and all who live here.  Respectfully, Rhonda Salerno	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Salzman	Thank you for the opportunity to comment on the Navy's Northwest Training Range Complex (NWTR) Environmental Impact Statement (EIS), My concern is that even if NOT lethal, the sonar testing may have a negative effect on whales and other maine mammals. Please do NOT do this. Thank you, Richard	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Samonas	I am very concerned and extrememly appalled at the consideration of expanding the Naval scientific research in the Puget Sound! Our roles as habitants of the earth is to PROTECT! As a mother of two boys I have always tried to imprint that humans need to tread lightly, we were actually the last species to inhabit the planet. These endangered whales and marine animals' lineage goes back as far as the dinosaur age. What will you tell your children?	This comment has been duly noted.
Sandberg	Due to the previous testing of high energy sonar resulting in whales beaching themselves in Greece, the Canary Isles and the Bahamas and the necropsies of those whales showing internal bleeding near the ears I suspect that further testing may result in the same. I notice that your proposed testing areas along the Pacific Northwest coast are areas which are clearly within the whales annual migration pattern. This is unacceptable. We are not at war with the whales. You need to find someplace to test that does not seriously damage other sentient beings.	This comment has been duly noted.
Sander	The probability of the US needing the kind of weapons and tactics being tested is much smaller than the probability of destroying the grey whale	This comment has been duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of

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	population, the killer whale population, and the salmon population as well as many other kinds of ocean flora and fauna. In order for the planet to survive all the species must be protected - not just the citizens of the United States of America.  Please let us begin to have a global vision - not get caught up in the possibilities of how much damage we can generate.  I implore you to call off this ill advised plan. Thank you, Ruth Sander	all relevant facts and impact analyses.
Sangster	We are writing in opposition to the proposed increase of activity in Northwest Training Range Complex off the Pacific Northwest Coast. We recall a previous increase in such activity in the 1990's which was disruptive not only to us as residents but, we believe, to the abundant wildlife in our area. As a previous President of San Juan Islands Audubon Society, I am aware of nesting bald eagles, peregrine falcons, great horned owls and many other species of birds in our immediate area. We are surrounded by wildlife preserves on Chadwick Hill, Watmough Bight and Iceberg Point. We know that the Navy reversed its position in the 1990's and reduced flyovers to a more tolerable level. We ask that the proposed increase be cancelled. Thank you, John and Patsy Sangster	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  Please note that the proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Sarratt	The continued use of Depleted Uranium weapons is polluting and contaminating our over-stressed ecosystem in and around Puget Sound. Please desist immediately. The lack of adequate science to either prove or disprove the above statement is reason enough to stand down. Radiation hazard is nothing to fool around with.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Satterlee	Thank you for the opportunity to comment on future uses of the NWTRC. I appreciate that the Navy is active in habitat restoration and species protection.  I am grateful that the Navy is helping to capture and remove derilect fishing gear lost at sea.  However, I am very concerned that all the above positive actions are completely negated by the Navy activities that effect on ALL the ocean's animals, plants, passing birds, the waters and the air above, and the surrounding lands. Human combat activity and training is harmful to the planet and its inhabitants. Bombs, missles, boat wastes, propellers, etc. each have huge negative effects on the delicate balance of lifeespecially in our last bastion for preservation before complete pollution - the Sea.  Please, now is our time to stop war and all it entails. We must move our full attentions to peace, harmony and non-intervention with each and every habitat.  Please consider that the NWTRC belongs to The Planet, not to us to disturb and pollute with intense sound waves, explosions, submarine props	The Navy has a strong interest in preservation and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.

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	negatively effecting whales and other sea animals, and on and on and on.  No more military practicing of any kind in, above or around the northwest and all oceans.  Thank you very much! I would appreciate a copy of your final report on this matter.  Sincerely, Dana Satterlee	
Saunders, E.	I am all for the Navy taking a larger role off the coast of Oregon. I fully support your programs. Thank you for your service to the country.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Saunders, J.	Please do not increase flight training on Whidbey. This increase would adversely affect our quality of life here on south Fidalgo Island.  Thank you for your consideration.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Sawyer, S.	Since the death of my husband, a Navy man, as was my father, not much has caused me greater distress than the recent reports from the hospitals treating the wounded in Gaza for wounds sustained by weapons the Israelis obtained from the US, developed at Lawrence Livermore Labs here in the greater Bay Area. I am not unaware of the imperatives of global realities or history but I think we need to constantly readdress finding non-violent ways to resolve conflicts and I am strongly opposed to the development and/or testing of weapons. We have a responsibility to our children, our species, our biosphere, our planet, to preserve life in a less destructive way and we need to devote more resources to this progress.	This comment has been duly noted.
Sawyer, Susan	Living in the beautiful Puget Sound area, which the Navy knows is a marine sanctuary, deserves extra protection and sensitivity to all creatures and fauna inhabiting these waters. The Navy's plan to increase their combact training activities in this area spells disaster and a complete lack of enviornmental sensitivity for tourism, fishing, wildlife maintenance and human life. Find another area to test with less impact to all life forms.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.  Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Scalmanini-01	The EIR should list ALL of the chemicals that are to be used in the proposed expanded Northwest Training Range Complex. The EIR is invalid until it lists ALL of these chemicals, so they ALL can be evaluated by the public for their impact upon the environment, including their impact upon the public itself. The EIR's many statements that "…there are no significant impacts…" are not, and cannot be, true and believable, because the listing of hazardous materials to be used is incomplete. The EIR admits that marine life will be harmed but does not quantify this harm. This harm is therefore by default excessive and does not justify the expansion of the training range complex.	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Scalmanini-02	The EIR must indicate who is responsible for the negative consequences of the project for the EIR to be valid. The EIR must state the length of time for which the expansion of the training complex is requested for the EIR to be	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.

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	valid.	
Scalmanini-03	The EIR must state whether radioactive munitions, including but not limited to depleted uranium, will be used, and the effect of these munitions upon the environment, including upon the health of humans and animals, both land, ocean, and air dwelling.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Scalmanini-04	The EIR must state how much the US Navy and US Department of Defense will reimburse the affected states, including but not limited to Washington, Oregon, California, and Idaho, for the state's costs incurred in disposal of hazardous waste and in clean-up of toxics from the military's use of the proposed expanded complex. The EIR does not state the expected effects of bioaccumulation of chemicals used upon marine food species, including but not limited to salmon, rock fish, crab and other shellfish, and/or the effects of this bioaccumulation upon humans who consume them.	The proposed action does not require any state cleanup of training areas described in the EIS/OEIS. Please see Section 3.3; Hazardous Materials and Wastes.
Schaaf	Please do not pollute or beautiful Puget Sound and Pacific ocean. Stay in Nevada.	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Schanfald	I oppose this plan to use the Pacific and nearby water bodies for military training. We already have the Navy in Pt Townsend WA, which has very much angered the citizens of WA State, and other military activities elsewhere. The No Action Alternative is preferable. I don't understand why you would venture into this when the three governments of the West Coast CA, OR & WA are trying to cleanup and protect that Pacific from negative environmental impacts. Ditto for Puget Sound/Strait of Juan de Fuca in WA State, where millions of dollars and human hours are being spent to cleanup, restorate and protection for the long term these waters.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  This comment has been duly noted.
Schlenoff	Proposed expansion of NWTR activities along the Oregon coast is likely to increase damage to ocean ecology, resulting in measurable impact to a wide array of nesting and migrating seabird species. The Lane County Audubon Society supports designation of USFWS Refuges, IBAs, and OPAC-designated Marine Reserves along the Oregon coastline as off-limits to NWTR activities. The ecological value of the USFWS Oregon Coast National Wildlife Refuges, etc. is significant as they support over a million nesting seabirds and provide refuge to millions more migratory birds. We request endangered species consultation with United States Fish and Wildlife Service with regard to expanded Navy activity impact on the federally-listed distinct	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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	population segment of the Marbled Murrelet and the federally-listed Brown Pelican. We request further research into potentially harmful effects on whale species, particular those whose populations are at depleted levels. Thank you for your consideration of these issues.	
Schmidt	You've probably heard several negative comments & complaints from residents in the Methow Valley - however, there's still many of us, especially those with some flight training, who think that seeing/hearing the jets go over is the coolest thing in the world! We race to the windows to see them! We realize that the training is necessary, and wish the best for the pilots - no crashes, that would be absolutely devastating to see! Carry on - God bless America!	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Schmiett	The NWTRC almost completely engulfs the Olympic Coast National Marine Sanctuary ("NMS"), a region of extraordinary biological diversity. Twenty-nine species of marine mammals occur in the Olympic Coast NMS, including eight threatened or endangered species of whales, otters and pinnipeds. The sanctuary provides important regular foraging habitat for humpback and killer whales, including the endangered Southern Resident killer whale population. Gray whales use the sanctuary during biannual migrations between calving and feeding areas, and a small, possibly distinct, group of gray whales known as "summer residents" use the area for feeding every summer. Additional cetacean species that have been observed in the waters of the sanctuary include: minke whales, fin whales, sei whales, sperm and pygmy sperm whales, blue whales, Hubb's beaked whales, Cuvier's beaked whales, Baird's beaked whales, Stejneger's beaked whales, Risso's dolphins, false killer whales, common dolphins, northern right whale dolphins, Pacific white-sided dolphins, Dall's porpoises, and harbor porpoises. Sea others and pinnipeds such as Steller and California sea lions, harbor seals and elephant seals use near-shorle areas within the sanctuary, haul out on land at a number of locations along the coast, and use deeper waters for foraging. A recent NOAA report specifically identified both military activities and underwater noise pollution as two of several emerging threats to the Olympic Coast NMS. 3 The report recognizes that noise pollution has the potential to compromise habitat quality for the marine mammals, fish and other wildlife that inhabit the sanctuary. In particular, it finds that "an increase in Navy activity or areas of operation, if not properly controlled, could have potential to disturb the seabed, introduce pollutants associated with test systems, and produce sound energy that could negatively alter the acoustic environment within the sanctuary." 4 The Navy's repeated platitude that any impacts are short-term in nature and thus wou	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.

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	mitigation strategy so narrowly defined that it effectively disregards the environment. The Navy can, and must, adopt meaningful measures to reduce the harmful impacts of sonar, including spatial and temporal restrictions for its training exercises. As described in detail in Appendix A and Section IV below, these measures should, at a minimum, include protecting the following areas:	
	All inshore waters of Greater Puget Sound (including the Strait of Juan de Fuca and Strait of Georgia)	
	Lower Continental Slope waters between 500 and 2,000 meter depth contours	
	Outer coastal waters between the shoreline and the 100 meter depth contour	
	Certain canyons and banks off Northern Washington State and Oregon	
	The Olympic Coast National Marine Sanctuary Protecting our nation is an important goal, but it can be done without destroying that which makes it worth protecting. Please reevaluate your expansion projects in the pacific northwest. Sincerely, Kathryn Schmiett	
Schoenmakers	I am opposed to the Navy pursuing or expanding testing weather controls and any attempts to tinker with what is already a very challenging part of the weather picture in our part of the world. The Pacific Northwest is at the confluence of at least three separate weather systems that can combine to produce drought, flooding, excessive warming and/or excessive cold. Or, are those conditions being created or exacerbated by the Navy's activities? I am concerned that California is experiencing unprecedented drought conditions while Western Washington has recently experienced unprecedented snow and flood conditions. Despite all the precipitation that caused the record snow and flooding, the warmer weather that followed melted away a significant part of our winter snow pack, which could mean drought conditions in the spring and summer months. Not to mention that Western Washington derives its electrical power from rivers and dams that require sufficient water levels to be maintained to meet consumer demand. Washington also benefits from selling surplus electrical power to other states who do not produce sufficient power on their own. I urge that the Navy not mess with this complex and volatile system. Whatever you are putting into the environment over the Pacific Ocean will make it's way into Western Washington. It has been proven that chemical pollution originating in China eventually reaches the Western United States, which is why our government is strongly urging them to implement cleaner air/emission controls and cleaner methods of developing and using power. Again, I would urge caution. This could ruin our weather, our air and water, our agriculture, and our economy.	We are not testing weather controls.  All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.  This comment has been duly noted.
Schopf, G.	The draft EIS/OEIS is incorrect in stating that "few if any" noise receptors would be affected by the proposed activity (Para 3.5.6 Summary). I am a receptor living in the Dugualla Bay area near NAS Whidbey. My 200 neighbors and I would certainly be affected by the addition of several thousand sorties. The report does not honestly reflect the	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.

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	facts.	
Schopf, S.	I reside on the north end of Whidbey Island in the Dugualla Bay area. At present there is significant air traffic noise at times but it is sporadic and therefore tolerable. We knew of the level of this impact from NAS Whidbey Island when we built our home here four years ago.  My understanding is the proposed changes to NWTRC will increase air traffic to almost double the number of flights from the NAS Whidbey Island. This will subject our entire community to INTOLERABLE NOISE DISTURBANCES in our homes.  This is our retirement home which we anticipated enjoying for many years. If the noise level increases to the proposed extent we as private citizens will be damaged not only by being deprived of the peaceful enjoyment of our homes but the value of our properties will be significantly impacted as well. In addition, the increasing the number of flights over our neighborhood will also increase the potential of a plane crashing into homes or homes here!! Some of the planes come quite low over our home now and I really dread the thought of that increasing. PLEASE DO NOT DO THIS TO US!!	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Schorr	Hi, I do not support the proposed increase in activity out here. The concerns for the well-being of the wildlife which share our region are legitimate. I am also concerned for the well-being of the citizens living here, more sorties would make it very difficult to live out here, run businesses, and attract more people to relocate or visit. I also question the logic of ramping up training to prepare for future wars while simultaneously working for peace. Especially given the economic crisis engulfing the world. Let's save that money. We are powerful enough, we do not need to increase our military presence anywhere right now. Thank you!	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Schultz, B.	To Whom It May Concern: I write to oppose the proposed expansion of the Navy Training Range. Orcas, other whales, and other marine mammals are threatened by this expansion with increased harm, as I understand the Navy's own review. The danger here is that, under the rubric of national security, we'll risk further destruction of precious wildlife—wildlife that's integral to natural systems, not just valuable for whale-watching tourists and residents. In his much-heralded classic "Land Ethic" essay in A Sand County Almanac, Aldo Leopold argued for including non-human creatures in our moral community—just as in times past those previously treated as slaves have become part of the moral community. This means treating marine mammals with respect and care, not increasing the destruction of their habitat by excessive auditory stimuli. Thank you for "listening." /Bob Schultz (Ph.D.)	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Schultz, K.	Please refrain from expanding your range of testing warefare in the 5 states which includes my home state of California. We do not need any more war. It is time for peace.	This comment has been duly noted. The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is

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		proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Schwarz	I have lived for all of my 55 years in the Puget Sound Region. In the mid- 1800s my ancestors brought covered wagons to the West Coast for it's natural beauty and bounty. Family vacations (and vocations) for generations have been spent on the Oregon Coast. My father built the roads, highways and bridges to the Oregon Coast.  Our regional waters and marine environments both on the West Coast and Puget Sound is the one most important element defines our environment and lifestyles. PLEASE DO NOT EVER do weapons testing or in any way pollute or put our fragile marine environment and marine life at risk!!!! Please never use depleted uranium anywhere as it threatens our health. Please do not do underwater tests that could damage the very sensitive sonar navigation/hearing of whales and other aquatic life.  As your duty to the American People and your moral and treaty obligations to Native Peoples, please do everything in your power to protect and restore our fragile marine ecosystems. In the core of your heart, you must know that imposing your testing is causing harm to life and to the very waters that sustain us and define us.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.  All local native nations have been contacted for this EIS/OEIS process.
Scott, C.	I object to testing any weapons especially sonar, uranium, phosophorous, microwave, sonar, and other weapons of mass destruction on the Columbia River. Phosphorous is an illegal weapon from what I understand. It's horrendous effects have already been tested and proven on humans in Iraq and Palestine. Sonar has been and continues to be tested in the ocean, harming dolphins and other marine mammals. Surely we know the effects of uranium by now. These destructive weapons do not belong in our Columbia River ecosystem. Please halt this dangerous testing.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Scott, K.	According to your Lincoln City meeting last Friday, Jan 30, you plan on using high frequency sonar, mine fields, and EA-18G Growler aircraft? And you do not expect any marine life damage. You are joking, right? I am the Skipper of the S/V Noe Mar and she is located in La Paz, Mx. I have sailed down the coast,in shore and 40-60 miles out at sea. This area is pristine and rich in marine life, please do not do this.  I realize that you need to keep you operators sharp and in practice if you are	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are

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	to defend the USAbut there has to be another wayplease, you are men and women of the seathink about this, SERIOUSLY.  Sincerly, Skipper, Ken Scott s/v Noe Mar	required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Scranton	I am opposed to increased test flights (sorties) over the San Juan Islands and surrounding area. There is already too much noise and an increase would be intolerable. The planes fly over my house all the time and the noise is deafening and disturbing to wildlife and people. Thank you for hearing my comment.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Scriver, I.	Hello W.I.N.A.	The proposed action includes increases in the number of certain activities
	I have lived on the south end of Lopez Island for 30 years. I was among the original concerned citizens who met with Naval officials in the '80's over the extreme disturbance by low flying naval jets. We are still here. The noise is deafening to those of us on the ground here to the point that we must cover our ears and discontinue conversation for an extended period of time during a fly by. The elevation of the jets is ALWAYS low. We are a part of YOUR family AND the environment that you claim to want to protect. PLEASE do so by NOT increasing the amount of air traffic over the south end of Lopez. It is literally painful to be on the ground as the jets fly over! Thank you, Irene Scriver	while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Scriver, S.	We strongly believe that their is absolutely no reason to further air training, it is a great disturbance as is and only leads to pollution, large sums of government money that could actually be doing good for our people and the world!!  We need to move into a new era of Peace and working together! War is NOT the answer!	This comment has been duly noted.
Sebring	I am very concerned about the impact the US Navy Northwest Training Range Complex will have on our environment and our safety. The hazardous materials, proposed actions, and training exercises detailed in the draft EIS/OEIS are ominous and represent a grave danger to our environment and health. As a mother, I am concerned about the safety of my children and the safety of future generations after exposure to dangerous chemicals such as depleted uranium and white phosphorus. The proposed facility represents a danger to human beings, wildlife, marine life, and our overall quality of life. Sincerely, Kim Sebring	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the resources listed below. Section 3.3 Hazardous materials Section 3.16 Public Safety

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		Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.  White phosphorus is not used in the NWTRC and is not part of the
		proposed activities.
Segal	I am concerned for the environment, both air and water, when our military are planning to use the coast of California, Oregan and Washington and other places, like Hawaii for target practice. I have a daughter in Oregan and another in Hawaii, plus family. Why does the military need to put our air and water in danger of polution. We do not need enemies to attack us with dangerous/complex weapons when our own military are causing problems by testing in our environment. Can't we do without such "tests"? I am afraid it is a matter of business rather than need! Sincerely, Elizabeth Segal	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.  This comment has been duly noted.
Seidel	I demand that we have more time to review and determine whether this training range complex is a good idea. Please suspend this act immediately for the health and wellbeing of the american population.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Seraphinoff-01	1) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.

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Seraphinoff-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Seraphinoff-03	3) It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	To show the effect throughout the entire area, the original approach (expended materials averaged throughout entire area) is taken in Section 3.3.
		To illustrate the potential effect to various species, Sections 3.6 through 3.9 were changed in the Final EIS/OEIS to consider higher concentrations based on typical exercises where either a large number of expended items are used, or large-sized expended materials are used. The approach here is to determine the localized density of expended materials taken from individual activities.
		Please see Section 3.6.2.2 of the Final EIS/OEIS ( <i>Deepwater Benthic Habitats</i> beginning on p. 3.6-18) for a detailed explanation of this method.
		Of note, in the 2008 report of the Interagency Marine Debris Coordinating Committee (NOAA 2008), military expended materials was not listed as a significant source of marine debris. Also, the Northwest Fisheries Science Center conducted bottom trawls along the coast of Washington, Oregon, and California in 2007 and 2008. Of 469 tows in which marine debris was recovered, none of the debris off of Washington, Oregon, or Northern California contained military expended material. This, after decades of similar Navy activities.
Seraphinoff-04	4) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient reason.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Settle	WITH THE CURRENT ECONOMIC NEEDS SEEN ACROSS THE US IT SEEMS IRRESPONSIBLE TO BE ALLOCATING FUNDS TO WARFARE TESTING IN THE WESTERN STATES. THE TESTING That is being considered has huge impact on the environment and many additional side effects that are a threat to the people. Seismic, climatological, toxicologic, ecologic and medical safety factors should be evaluated thoroughly, so as to fulfill the purpose of an EIR and protect the rights of the inhabitants of these regions. Please look beyond the envelope and see the future implications for all involved. Thank you.	This comment has been duly noted.
Severinghaus	I am outraged at the arrogant disregard by the Navy of the multiple possible dangers to the environment and wildlife by the plans to use the Pacific Ocean off of Washington Coast, including Olympic National Park shores, to test various weapon systems whose possible dangers to the environment and wildlife are clearly not yet totally spelled out and dismissable. There must be	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the

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	a moratorium on such testing until the EIS can be clearly document the tests to be harmless. Thank you	NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Sevy-01	Dear Sir or Madam: 1) I OPPOSE THE NAVY EXPANDING WARFARE TRAINING OFF THE COASTS of Washington, Oregon and Northern California. The Navy already has everything it need s to conduct training exercises.	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Sevy-02	2) The increased use of sonar will definitely harm whales	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Sevy-03	3) Pushing the 1,000 page environmental review with little notice (two small notices in small coastal papers) and one 90 minute hearing for all of Oregon shows no regard for marine life and displays a juggernaut mentality to get its way.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts. As described above, the potential impacts of the proposed action of this study are deemed to be minimal in Skagit County.
Sevy-04	4) Personally I believe the Defense Establishment uses fear of terrorists to downplay the real threat the Navy poses to all marine life unfortunate enough to be in its path.	This comment has been duly noted.
Sevy-05	5) Marine life in general and whales in particular lived along the northwest	This comment has been duly noted.

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	coasts long before the U. S. Navy came along and therefore deserve the utmost protection.	
Sevy-06	6) Particularly troubling is the fact That if the Navy wins approval from its environmental regulators it will not have to go back to them for further approval	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
Sevy-07	7) Even more troubling is the increased use of midfrequency active sonar would ruin whales that have to use sound to communicate and navigate.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Sevy-08	8) I vehemently oppose expanded warfare training off Northwest coasts. No action alternative is the only plan and it is destructive enough. ALICE SEVY February 8, 2009 www.nwtrangecomplexeis.com P. O. Box 165 Keno, OR 97627	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Shilling	Please reconsider the war testing that you may think you need to do. When you discard unnatural or an abundance of natural but toxic substances into the world's ocean you affect us all not just the marine mammals but the planktin to the whales. Why do you think this is needed? Please help take care of this planet, ask your grandkids what you should do.  Dr. Leslie Phillips	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Shober	I oppose the Navy's proposed increase in Georgia Basin/Puget Sound military training exercises.	This comment has been duly noted.
Shrut-01	Please do not increase your sonar tests in the pacific Marine Mammals are affected adversely that is fact!!! Stop this testing of weapons and radioactive waste disposal now. Leave the levels of testing as they now are or reduce Absolutely do not increase this	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Shrut-02	I am strongly in favor of letting our natural environment rest from the insults of human ignorance; i.e. when we presume to do activity such as low frequency sonar tests in the ocean, dumping munitions and their attendant toxins, and using this resource as though human endeavors are more important than whale, fish, dolphin, birds trying	This comment has been duly noted.  As stated in section ES.1.5.7.1 of the Executive Summary, the proposed action of this EIS/OEIS does not include the use of low-frequency active sonar and was not analyzed as a result. Complete analysis of potential

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	to eek out a living in the sea, I say STOP the madness NOW I am disappointed that the Navy even is considering such obvious degradation in the name of national security. Stop this NOW	marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.  The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The broad objectives set forth in this document are both reasonable and necessary. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062.
Shrut-03	1) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Shrut-04	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Shrut-05	3) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Shrut-06	4) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
		To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Shrut-07	5) Other points I feel need addressing are these: There is a lack of information available to assess the impact of a) radioactivity, b) heavy metals, c) explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent

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	lack essential public information.	studies.
Shrut-08	6) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Shrut-09	7) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Shrut-10	8) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Shrut-11	9) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary."	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that

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		"most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."  A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Sibbet	What we allow in the name of "defense" is in truth harming us.	This comment has been duly noted.
Siegel-01	I strongly urge the Navy to choose the "NO ACTION" option.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Siegel-02	Using depleted uranium under any circumstance is counter-productive to life and health - particularly the health and well-being of all who eat fish or swim in water. It's stupidly short-sighted. UNSAFE.  Defend with normal weaponry. Testing with depleted uranium harms US citizens and destroys the environment we need to live. You cannot measure the total impact, especially over time. Period.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Siegel-03	Do NOT use that sonar. That kills whales, dolphins and other marine life. Again, you do not know the total impact nor how US citizens and life will be impacted. Yet it will always be destructive.	We recognize your concern but would like to reassure you by informing you that the U.S. Navy has conducted sonar and underwater detonation activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar or underwater detonation training exercises in the NWTRC.
Siegel-04	Your job, your challenge is to PROTECT LIFE, not destroy life. Thank you.	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research, spending \$26 million in FY08. See the Final ElSfor more information about the Navy's contribution to conservation and research.
Sietman	I am concerned about the impact on the area since I am a long time resident. I support the military and know the importance of good training. However, there are all ready many health problems that have a higher threat in this area than in others and I just want to make sure that everything is being done that can be done to insure the safety of our wildlife, land and sea, and of our children and the trainees when training is done. I have read some conflicting reports about the impact it will have in the area and I only want to voice my opinion that the environment is very important if we are to maintain life here. I	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek

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	would appreciate being informed of any public forums held. Thank you.	opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Silkiss	Our Bill of Rights protect citizens quality of life. Increased sorties and 4X more decibels is not warranted nor acceptable. High decibel levels are a form of torture, used to subjugate enemies or crowds. We are your neighbors, not enemies. Sound decisions should enable the Navy to eliminate the public's unwarranted stress. The Air Force came to our aid in the South Pacific, during WWII. We appreciate your guarding our Nation.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Singh	I am very opposed to this proposal. Dropping radioactive material anywhere is not a good idea obviously. It needs to be contained, often for periods as long as one million years, depending on half lives. The Navy is in the Defense Department, charged with defending us citizens with our money, that's what we pay you for. Instead you propose exposing us to dangerous substances, and as you know not for the first time. There is a long history of the Defense Department doing just that. Do not add to that sorry history.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Slagle	It is unacceptable that this site is under consideration for machinery trainging use. The environment the Navy wants to utilize for these exercises is habitat to nine ESA-listed marine mammal speciesincluding orcas, whales, and sea otters; three threatened salmon species; more than 70 bird species; and untold numbers of fish and other creatures. And of course, we humans in the vicinity will also be exposed to the effects of this "training range". I'm looking for the improvement of marine health instead of more species diminishing. Please amend your plans.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential

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		marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Slama	I vehemently protest the Navy's plans to kill the marine life and poison our waters, air and soil in Washington, Oregon and California.  This "taking" of marine mammals negatively impacts the entire ecology of our oceans and the life in them which feeds large numbers of people and other species around the world. Now the United States government has decided that California, Oregon, Washington, and Idaho, and the Pacific Ocean marine life in those areas, are expendable in order to test more war weapons of mass destruction. It should be noted that the list of toxic chemicals is a long one as noted in the Navy E.I.S. Depleted uranium, red and white phosphorus, and a whole host of chemicals known to be toxic not only to man, but to marine life, are being served up on the "Navy Warfare Chemical Menu" that will contaminate our air, water, and soil.  White Phosphorus is just one of the chemicals on Navy Toxic Menu: Berkowitz et.al (1981), in assessing the potential hazards associated with the use of phosphorus smoke munitions, reported that White Phosphorus residues in aquatic systems can be extremely toxic. Berkowitz stated that the deposition of washout ofWhite Phosphorus, especially in water bodies may create exposure risks to resident finfish, invertebrates and waterfowl, even if resultant White Phosphorus concentrations are in the low ppb range. 1996) Please do NOT do this!!!	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either A or B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected.  Regarding Depleted Uranium; following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.  Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Slezinger	Please do not use sonar in the oceans! I understand that testing is to take place in the Northwest area. This is cruel, unnecessary and irresponsible. Please prevent it from taking place.	This comment has been duly noted.
Slivinski	I respectfully would like to emphatically vote NO for your request for increased frequency of sorties. I retired to Anacortes thinking it was a nice quiet community until learning that we are one of the over-flight areas. I want you to understand that I appreciate our men and women in service but wish this type of training would be in a more suitable environment, like the desert. Thank you for soliciting comments from the public.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.
Slosberg	why do your training where innocent animal and fish could be harmed? Please stop. Thank you.	The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Small, Jack	The US Navy exists to protect our nation from all enemies foreign and domestic. Now the USNavy is acting like an enemy. We must protect ourselves from the USNavy, How strange! It is not the Navy's fault that this is so. It is the fault of all of us. In our blindness with respect to thedevelopment of a world where we have increasingly been destroying ourselves, we are now biting our own tails, poisoning our food supply, threatening our own survival, and have gone so crazy that we refuse to notice that war has	This comment has been duly noted.

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	become so destructive and self defeating, that we are now well on our way to a level of destructive behavior that we can see our earth being destroyed before out eyes. Our weapons are so efficient that we have become fascinated with our power and are blind tohow destructive our activities have become. It is far, far more overdue for us to change the way we are behaving. We have the knowledge to solve our problems in ways that will not destroy ourselves. We must rein in the hounds of war Jack W Small USNR 19431950.	
Small, Joyce	I am strongly apposed to the Navy i.e. President Bush's warped notions about what are appropriate responses seen from a perspective guided by military minds. Not only is it way past the time when war should have been down graded as the way to have influence in the world, this is happening at a time when lots of informed and concerned people are horrified that we continue to destroy our natural heritage with blind old hat thinking about the need for "power" in the "blow them up sense" in today's world. Given that we have not yet achieved enough change to totally ignore old military thinking, perhaps some kind of "games" are necessary. Still these exercises can be undertaken way, way, way out away from our coastline, with due attention to the many many creatures, large and small, that seem to be in great danger due to these exrcises. Please rethink this whole thing. The feelings are deep and powerful against these kinds of things, which is more than appropriate from many standpoints. Please put the military "mind" thinking to one side for a reasonable period and look at such things in a much larger context. Joyce C Small	This comment has been duly noted.
Smart-01	I am writing to you as a very concerned citizen who lives on the coast of California. I am concerned about the NW Training Range Complex EIS/OEIS. I appreciate the extended comment period that you have provided to listen to citizen concerns.  I am aware and sensitive to the needs of the Navy to protect its shipborn personnel. However, the Navy's refusal to adopt realistic restrictions that would minimize damage to marine mammals and the coastal environment during tests are hard to justify. While my concern is primarily about damage to marine mammals, coastal habitats and ecosystems, the Navy should be very concerned about the public relations nightmare that mass strandings, offshore battle exercises in sight of concerned visitors and residents, and dead animals appearing after these exercises will cause.  I am the volunteer coordinator for the Point Cabrillo Light Station State Historic Park. Every year, we host thousands of visitors who come to the Light Station for the twice annual migration of Gray Whales along our coast. There is no offshore limit to the Navy's proposal, raising the possibility that during the annual Gray Whale Festivals in Mendocino and Fort Bragg, many visitors and residents would be seeing injured and dead marine mammals and the submarines that caused that damage. This would be a public relations nightmare for the Navy.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise. Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S.

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		Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Smart-02	I am also a volunteer with the Marine Mammal Center and receive calls about stranded and ill marine mammals within the boarders of Mendocino and Sonoma counties. The Navy plans to use both mid-frequency and high frequency sonar in the coastal waters; these have a history of injury to marine mammals. It is my understanding that the Navy itself has estimated that its California sonar drills would disturb or injure 170,000 marine mammals and cause permanent injury and possible death to more than 450 whales, as well as temporary impairment in at least 8000 others. Visitors and residents will be calling to report these strandings and they will be in the news.  Reasonable accomodations that would enable some of these exercises to proceed with minimal damage have been proposed. Dr. Ken Balcomb, himself an ex-Navy man, has tried to advise the Navy on how to enable some of these exercises to go forward with minimal damage to animals, and minimal damage to the Navy's reputation. Before the last administration exempted the Navy from having to follow the regulations and protections of the Environmental Protection Act and Marine Mammal Protection Act, the Navy and Dr. Balcomb were making progress. Dr. Balcomb himself, in a recent presentation at the American Cetacean Conference in Monterey, said there should be and could be balance between national security and protecting the coast and its shore and marine life.  I have reviewed some of the Navy's DEIS/OEIS  WWW.NWTRangeComplexEIS.com. The plans are quite alarming in their range and scope. The potential effects of new and increased military activity off the coast of California will result in a general degradation of the natural environment, be fatal to wildlife and detrimental to the human quality of life. Mendocino County depends on tourism for its economic health. These proposed exercises, rather than potentially increasing national security, threaten the economic vitality and health of people living in Mendocino County.  Thank you,	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.  The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.
Smason	I object to militarization of the Pacific coast! No expansion of military training on the Pacific!	This comment has been duly noted.
Smeeth	I strongly recommend that the US Navy take the "No Action Alternative" to their Northwest Training Range Complex expansion. I am very concerned about the possibility of increased release of lethal, toxic chemicals from these military tests which would cause imminent harm to myself, my future children,	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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	and our greater community of human beings, animals, and the natural world which we depend upon to stay alive. Please consider the severely detrimental effects of such activities.	
Smith, D.	I am in full agreement with the proposed use of the stated area.  Darrell Smith	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Smith, J.	I am very pleased to see that the Navy is planning to expand its training along the West Coast. We would be thrilled to see Navy ships operating in the Crescent City, CA coastal waters. I have every bit of confidence that Naval operations will have an insignificant impact on the environment.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Smith, K.	Your planned acivities are appropriate and you should ignore the "not in my back yard crowd".	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Smith, L.	Please stop the exercises off the Oregon coast. We already have a dead zone off of the coast that is growing.	This comment has been duly noted.
Smith, N.	Let's "take" some high Navy officials and some from the secret government behind it all, place them in a tank filled with water, and then set off high frequency sonar until their ears start bleeding from internal hemoraging and their brains explode.  No sonar testing in the ocean. No "taking" of marine mammals! Stop the insanity!!!!	This comment has been duly noted.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service (NMFS). This method for evaluating "takes" of Marine Mammals is a term used to indicate the level of harassment, either Level A or Level B, under the Marine Mammal Protection Act; the term does not reflect a marine mammal death. The discussion of effects in Section 3.9 refers to the 32 species that are potentially found within the NWTRC but this is not an indicator of all species that will be affected. Neither the Navy nor NMFS predict any marine mammal deaths or serious injury to result from the Navy's training activities proposed in this EIS/OEIS.
Snow, N.	There is NO NEED for weapons testing along the Pacific Coast of the United States! This is the site of a major migratory freeways for whales and sharks. Sonar and other noise is extremely disruptive.  Our oceans are facing serious warming and acidity issues. We are not at war. We have a dire economy. Save your money. Protect the ocean, the whales, the sharks, and your reputation!	To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of

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		the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Snow, V.	I strongly object to your proposal to increase training exercises off the Oregon Coast. Our coastal economy has been devastated by the closure of the timber industry, and the severe curtailment of the fishing industry. We are suffering to protect endangered salmon, and you want to increase shells, bombs, and missiles where our fish migrate, and create a dummy mine field,to play with sonar in an area used by 9 varities of whales which are listed as threatened or endangered. How can you justify this? Not to mention the cost of throwing away all this ammunition, when the nation's economy is imploding. We are a natiton at war. I know it is a land war, but can't you be useful is some way over there? I want the no-action option. Vivienne Snow	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Snyder-01	Dear Sirs: I strongly urge the armed forces to reconsider their use of the coastal areas of No. California, Oregon and Washington for live weapons training. The EIS issued is woefully incomplete does not account for impact on cetaceans, toxic residue from the vehicles and weapons systems.	The cumulative impacts analysis addresses the environmental impacts that result from the incremental impact of Navy activities when added to the past, present, or reasonably foreseeable future actions that affect the same resources. Table 4-1 succinctly depicts the categories of past, present, and reasonably foreseeable future actions that affect cetacean populations. Identifying such activities and in fact comparing them for relative impacts is an appropriate approach to cumulative impacts analysis. The Draft EIS/OEIS does more than simply compare activities; it analyzes in detail the effects of Navy actions on specific resources, and places those in the context of other sources of impacts. With regard to Marine Mammals, the cumulative impacts analysis accurately concludes that Navy activities, while they may affect marine mammal species, will not present significant impact.
Snyder-02	On a personal note, the new overflight pattern out of one of the bases goes directly over San Juan Island, a place previously unpolluted with the noise of low flying jets. I live there, a long with several thousand others. It is not uninhabited. However, several miles south between, the islands and the Olympic Peninsula there is an uninhabited stretch of ocean. Please use that instead of flying over our quiet island. Thank You.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan Islands.
Sonne	There is no reason for additional testing in these regions that have already been so severely impacted. I suggest it be avoided here and everywhere.	This comment has been duly noted.
Soots	Thank you for extending the public comment period on the Northwest Training Range Complex.	This comment has been duly noted.
	The Oregon Coast is one of the jewels of the Pacific. One that we love and treasure, both as an economic and a cultural resource.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS.

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	It baffles me that under President Bush, we were willing to protect an environment in the middle of the Pacific Ocean, but we are quick to destroy our own home, along with the marine life that we as an ocean state so heavily depend upon. Our economy depends on fishing for livelihoods and tourism, including whale-watching as the Pacific Ocean the route that takes migrating whales from northern areas to the coast off Mexico. We value ours and our marine life too much to allow this to happen. Especially in these horrible economic times when Oregon has again felt the blow of unemployment harder than most states, the Navy should cease and desist this operation.	Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Sosa-01	1) I AM DEEPLY CONCERNED ABOUT POTENTIAL SONAR AND VIOLENT UNDERWATER EXPLOSIONS FROM MUNITIONS(?) AS HAZARDS FOR MARINELIFE NEAR WASHINGTON SHORES, IN A MARINE SANCTUARY, NO LESS. A COPY OF THIS LETTER IS ALSO BEING SENT TO OUR GOVERNOR, and OTHER STATE REPRESENTATIVES.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Sosa-02	2) ANOTHER CONCERN IS DEPLETED URANIUM BEING INTRODUCED WHOLESALE INTO WATER ANDSEABED TO SPREAD RADIOACTIVITY TO MARINE LIFE, SOME OF WHICH PEOPLE EAT.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Sosa-03	3) THE SAME CONCERN GOES WITH HEAVY METALS BEING INTRODUCED INTO THE WATERS, PASSING UP THE FOOD CHAIN TO THREATEN THE HEALTH OF LARGE MAMMALS AND OF HUMANS. IT IS INACCURATE TO AVERAGE POTENTIAL POLLUTANT CONCENTRATIONS OUT OVER THE ENTIRE EXPANSE OF THE HUGE RANGE COMPLEX, MAKING LEVELS SEEM BENIGN, SINCE LOCAL CONCENTRATIONS AROUND SPENT MUNITIONS WOULD BE FAR MORE TOXIC. AND	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.
Sosa-04	4) USING AREAS LIKE THE MARINE SANCTUARY FOR TESTING "BECAUSE ITI'S CLOSE AND CHEAPER" IS NOT A SUFFICIENT RATIONALE TO POLLUTE AND DISTURB A PRESERVED AREA.	This comment has been duly noted.
Sosa-05	5) ANOTHER ISSUE: ACCESS TO THE EIS DOCUMENTS WASOFF-LINE/UNAVAILABLEFROM JAN 15-21 (15% OF THE PUBLIC REVIEW PERIOD). ALSO, THE PRIMARY ONLINE COMMENT MECHANISM WAS DOWN FROM DEC. 29 TO JAN FEBRUARY 5 (86% OF THE REVIEW WINDOW!). PLEASE, IN FAIRNESS, EXTEND THE REVIEW DEADLINE BEYOND FEB. 18, A PALTRY ONE-WEEK EXTENSION YOU RECENTLY GRANTED!	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Sosa-06	6) OTHER POINTS I FEEL NEED ADDRESSING ARE THESE: * THERE IS A LACK OF INFORMATION AVAILABLE TO ASSESS THE IMPACT OF a)	a) Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training.

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	RADIOACTIVITY, b) HEAVY METALS, c) EXPLOSIONS, AND INTENSE SONAR ON NUMEROUS ENDANGERED AND DECLINING MARINE SPECIES, ESPECIALLY WITH PROPOSED TESTING OF NEW SYSTEMS THAT SO FAR LACK ESSENTIAL PUBLIC INFORMATION.	This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.  b) Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials. c) The full analysis of potential effects of the Navy's proposed activities to marine life is found throughout Chapter 3 of the Draft EIS/OEIS. The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Sosa-07	7) * THERE IS A NEED FOR INDEPENDENT UPDATED RESEARCH ON THE SEASONAL PRESENCE OF MARINE MAMMALS, FISH AND BIRDS FOUND IN THE TRAINING RANGES RATHER THAN CURRENTLY RELYING ON OUTDATED SURVEYS. THE NAVY NEEDS TO PROVIDE THE PUBLIC WITH ACCESS TO NON-CLASSIFIED AMBIENT ACOUSTIC INFORMATION IN THE TRAINING RANGES AS A BASELINE TO CONFIRM COMPLIANCE WITH OPERATIONS AND COMPARISON WITH INITIAL SONAR EQUIPMENT SPECIFICATIONS.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Sosa-08	8) * THE NAVY NEEDS TO HAVE DEMONSTRATED A MEANS TO RESPOND TO A MARITIME INCIDENT IN ALL AREAS INCLUDING INTERACTIONS BETWEEN SHIPS, COMMERCIAL VESSELS, AND WILDLIFE MIGRATIONS.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Sosa-09	*THE NAVY NEEDS TO RESEARCH AND QUANTIFY THE PRESENCE OF CURRENTLY EXISTING RADIOACTIVE SPENT MUNITIONS (DEPLETED URANIUM) FROM IT'S PAST ACTIVITIES IN OCEAN AREAS AND ESTABLISH CURRENT LEVELS OF THOSE MATERIALS IN FISHERIES, FISH, AND OTHER MARINE FAUNA. SAFETY RELATIVE TO HUMAN CONSUMPTION OF FISH TAKEN FROM RANGE FISHERIES, AND HUMAN ACTIVITIES IN THOSE AREAS MUST BE RESEARCHED AND ASSURED. IN GENERAL, IT IS THE HEIGHT OF CONTRADICTION TO ASSERT THAT WAR-PRACTICE ACTIVITIES ARE COMPATIBLE WITH THE PURPOSES OF A MARINE SANCTUARY."	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Sovola-01	Stop all proposed acitivities along our west coast. Your activities already destroyed most of the fishing industry on the East coast of the US. Your pollution, sonar, mines, and other activities are not wanted here. Leave our coastal oceans pristine. there is already too much damage from the Dept of Defense operations on our eco-systems and human health. The controlled media has not made this widely available to the citizens living along the west coast. WHY NOT? Stop Now!	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of

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		notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Sovola-02	The meetings the Navy has offered for Public comment and involvement have been kept from the public by the manner of not posting information in easy access places. Remote library's, no press release to the newsmedia ahead of time for those scheduled meeting for public comment. Many are kept in the dark. Is this how US Citizens are treated by our government and military? It is a total disgrace, and disregard for our welfare, and the protection of our ocean environments. This is a disgusting sham!	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Sovola-03	In addition The U.S.Dept. of Defense has turned on the U.S. Citizens with Genetic/biowarefare chemicals being sprayed all over this country. CDC knows all about this/part of the problem.  The public awareness is almost at critical mass. Total assault on U.S. Citizens with the Aerosol Programs in operation. Your activies of any nature are not wanted here or in our country.  You already have North. Washington. Stop any territory expansions. Leave the North Coast alone.	Comment noted.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Sparks, D.	The United States Navy does not have the moral right to use US citizens and their habitat, nor their natural assets on land, water or in the air for their experimental insanities. Cease and desist your plans for the Western US. My taxes are not to be used to destroy the wonders of my country!!!	This comment has been duly noted.
Sparks, R.	Welcome to our area. I am glad to see more training for the services taking place off of our coast. As a former submariner, bring my fellow sailors to my back yard any day. Peace through strength is not just a phrase these days. Keep up the good work.	Thank you for your support, The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Spencer, A.	It is my strong opinion that the awareness and understanding of this proposal has not has sufficient time to build so the citizens here can voice their concerns or approval. I will likely not have time to understand the matter fully before March 11th as I was just alerted to the issue this weekend.  Human health and environmental health are far to crucial a matter to leave this unexamined and results for not informing the public sufficiently before significant alterations to our environment occur could mean significant backlash and complications for the region and the Training Range Complex. I will be passing along all relevant materials to as many people as I can reach in the coming days. Again, I urge you to consider extending the dates of inquiry for the public.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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	Thank you for your consideration.	
	Aimee Kelley Spencer	
Spencer, M.	I live in the"Whale Watching Capital" of Depoe Bay. This is on our town's sign that greets our tourists. These tourists come to see and experience our whales, migrating by twice a year, also a resident pod who stays around our welcoming area. This tourism is our livelihood. If one does not care about the welfare of the endangered marine mammals (9 species mentioned in the 2/5/09 front page article of the Oregonian), than maybe the economic impact will count for something. I, myself, have been lucky enough to travel with Dr.Bruce Mate (also mentioned in the article) and others to San Ignacio Lagoon where the calves are born. Here one can touch the calves and their mothers. If one of these magnificent creatures is damaged by Navy sonar, that is one too many. The article in the Oregonian says that the Navy states that their sonar has contributed to 5 mass beachings since 1996, like that is acceptable, a good record?  We cannot allow some paranoid fear from some hypothetical enemy attack make us destroyers of the magnificent marine mammals whose very existence depends on what we humans do.  Please,as trite as it may sound, let the Navy and the rest of our military remember FDR's words about fear. Do not take the chance that we will be the part of the generation that causes the extinction of our gray whales and other marine mammals.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS. Section 3.14. It must be acknowledged that ASW activities have been conducted without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC over the last several decades. Given the natural variation of marine mammal location over time withinthe NWTRC, operational variability of Navy ASW operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.
	Thank you for the chance to submit my comments	
Sperbeck	The destruction of the oceans and her inhabitants negatively impacts the entire planet's ecosystem, INCLUDING OURSELVES. It is time for this country to stop perpetuating the cycle of war on our brothers and sisters on land and in the sea.	This comment has been duly noted.
Sponheim	The contamination of Air, Water and Land in the Northwestern States by weapons testing, will potentially harm U.S. Citizens. The location of this proposed testing has the potential to contaminate the entire United States due to the prevailing winds flowing from the west coast to the east coast. Please revise your proposed Environmental Impact Statement so it does not include any type of weapons testing in the proposed area.	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Spring	Terrible plan to use this pristine area for training the US Navy must stop it's assault on nature. The sonar being used is disorienting to various creatures and killing marine life, and DU weapons are highly radioactive for billions of years. It is the height of hubris to train to use these highly detrimental technologies. Stop such activities everywhere they are being used. It's time for the navy to act responsibly instead of arrogantly. Stand down now!	With regard to use of depleted uranium- Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS to describe that depleted uranium use is no longer included in the Navy's Proposed Action.  With regards to SONAR use- The U.S. Navy has conducted midfrequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of

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		significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Springstead	The consequences of making an error is huge, please make a complete EIS before ANY plans are put in place to increase target practice, maneuvers, bombing, etc. by the Navy along the Pacific Coast of Washington, Oregon, California and in the Puget Sound. Our marine life is suffering because of pollution NOW, introducing more toxic chemicals into their environment much less increased use of sonar has a potential for disaster. Please rethink your actions!	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Sprout	Please do not test weather chemicals in my region. I believe they are harmful to me and my family, as well as my community. I believe that "chemtrails" are already harming the Pacific NW (and all other places they are being created) and I request that you stop the releasing of all toxic chemicals into our atmosphere. Thank you for your consideration. Staci Sprout	The Proposed Action does not include testing of weather chemicals. Potential impacts from Navy activities were discussed within the Draft EIS/OEIS according to contemporary scientific standards. Contrails associated with military and commercial aircraft were not discussed within the Draft EIS/OEIS due to the absence of a nexus between activities and impacts.
St. John	Please, for the love of God, do not use depleted uranium anywhere in the Pacific Northwest. I am begging you as a citizen of this beautiful country and as a human being. Depleted uranium is classified by the UN as a weapon of mass destruction for good reason. In 1996 and 1997 UN Human Rights Tribunals condemned DU weapons for illegally breaking the Geneva Convention and classed them as 'weapons of mass destruction' 'incompatible with international humanitarian and human rights law'. The soldiers who are exposed to it are extremely likely to develop cancer or worse, and once this toxic waste gets into their bodies, it will not be leaving any time soon. Before the first Gulf War, where DU weapons were used extensively, the Pentagon's own reports warned that the radiation and heavy metal of DU weapons could cause kidney, lung and liver damage and increased rates of cancer. By now, half of all the 697,000 U.S. soldiers involved in the Gulf war have reported serious illnesses. These illnesses are now referred to as "Gulf War Syndrome," a euphemism to describe the awful toll those soldiers had to pay for DU exposure. American Use of DU has been called "A crime against humanity which may, in the eyes of historians, rank with the worst atrocities of all time." It is suggested that troops who were only exposed to DU for the brief period of the Gulf war were still excreting uranium in their semen 8 years later and some had 100 times the so-called 'safe limit' of uranium in their urine. Perhaps the most horrific side effect of using DU is the birth defects. If you have a strong stomach, then please google 'DU birth defects.' You will see what our extensive use of DU in the middle east has done to the most innocent victims, the newborn babies. Now when a woman has a baby in Afghanistan, she does not ask "Is it a boy or a girl?" She asks, "Is it normal?" Because of its very long half life, 4.46 billion years, DU stays in the soil, water, and air virtually forever, contaminating it permanently with toxic waste. And once you	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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	normally and I would not like to get cancer, and I would not like anyone in the Northwest to get cancer or have horrifically deformed children either, so please do not use DU. PLEASE, I am begging you, please do not use DU in or near America!! Stare at the pictures of those babies who have been horribly deformed because of DU use in Iraq and Afghanistan, and tell me you want that to happen here You cannot let this happen as Americans, and as humans. Please do not let this come to pass The day DU is bombed on the Northwest will mark the beginning of the end for the American people.	
Stafford	I do not support this project at all. Citizens will be used as guinee pigs and that is unacceptable.	This comment has been duly noted.
Stair-01	I am in favor of No Action Alternative in the Northwest Testing Range Compexies Draft EIS	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Stair-02	Whidbey Island is at the mouth of Puget Sound, which is a vulnerable area with poor water exchange to discharge toxins. Puget Sound fish and marine mammal populations are already stressed and on the decline.	Please refer to the following section of the Draft EIS/OEIS for water quality issues. Section 3.4 Water Resources
Stair-03	When testing does occur, it is important that marine mammals be excluded from an ample buffer area to protect their hearing.	Please see page 5-12 of the Draft EIS for a description of the safety zones in place for marine mammals.
Stair-04	We should not be using spent uranium at all; these materials need to safe disposal. The sea is full of living creatures.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Stair-05	I recognize the need for the Navy to practice and to test out weaponry. But Whidbey Island is not a war zone, and an abundance of precautions should be taken to protect water purity and wildlife populations. Sherri Stair	Please see Chapter 5 of the Draft EIS. There are many protective and mitigation measures in place to protect both the environment and its inhabitants.
Staker	You need to extend the comment time so that all of the citizens of the states involved can be made aware of this travesty you want to put upon usEIS is incomplete and more transparency of the possible hazards should be forthcoming.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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		The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Stariha	I am absolutely against this project. I don't want my state or any other state to be used as a test rat for one of their experiments.	Comment noted.
Starr	Dear Naval Officials, I am a 38 year resident of Friday Harbor and I want to advise you that I support the ongoing and anticipated activities by the US Navy in the Northwest Training Range Complex. I believe it is absolutely essential to continue this activity for our Country's military readiness. The occasional military aircraft that I hear flying over my home does not bother me a bit. I am proud to be a neighbor to the Whidbey Island Naval Air Station. As a former San Juan County Commissioner, I supported these Naval training activities with equal vigor at that time.  Sincerely, Thomas C. Starr	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Staub-01	This concerns your (the U. S. Navy's) plan to expand your Puget Sound activities down the coastline to northern California. These activities will include extensive air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures (including underwater "training" minefields), intelligence, surveillance and reconnaissance operations and extensive unmanned aerial systems operations (i.e., drones), in an area of ocean from the coastline to beyond the 12-mile territorial limit. During your activities in these waters you can prohibit entry into your training or exercise area. The excuse you have given for pre-empting commercial fishing, tourism, surfing, sports fishing, boating, and other recreation over the entire Pacific Northwest coastline is "national security."	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Staub-02	I believe this expansion would actually be a violation of state security for all the states involved. Interrupting our coastal activities and proceeding with military activities there is an economic and ecological threat to our states. Our fisheries are having enough trouble dealing with the effects of global warming	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent

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	and overfishing without adding military combat practices to the stressors on the fisheries. The effects of these same things on the marine environment are also detrimentally affecting the non-fished wildlife in the sound and the ocean. They also will be severely affected by military maneuvers off the coast. Washington, Oregon and California's territorial waters are, of course, a resource of the entire nation, and the issue of a Navy take-over is of national as well as state concern. Ceding all peaceful uses and enjoyment of our coastal waters to military war preparations reflects a monumental change in our national identity, economy, society and philosophy.	studies. The analysis consistently found either no impacts or very minor impacts.
Staub-03	The US Navy should have notified not only the people of these three states but of the whole nation of such a drastic shift in public policy. Additionally, the notification of the public, particularly in Oregon and California was grossly inadequate, irresponsible, and negligent. Putting an ad in one newspaper in Oregon, one in California, and five in Washington notifying the public of your intent to file an environmental impact statement does not constitute adequate notice. The hearings were similarly underpublicized and inadequate with one meeting in California, one in Oregon, and three in Washington. You gave the same inadequate notification of the publishing of the EIS and the request for comments. This is a flagrant violation of the intent of the laws concerning public notice and input on these matters. I implore you not to turn the Pacific Coast into a firing range. Abandon this unnecessary and detrimental project. And please correct your inadequate and negligent notification of the public in this matter.	The Navy has complied with all NEPA notification requirements. The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. A summary of these scoping meetings is included in Appendix F of the Draft EIS/OEIS.  Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Steed-01	I favor NO CHANGE to existing regulations on use of the Range. Puget Sound Orcas are NOT "stable" they are decreasing in part because of damage from high power sonar.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.

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Steed-02	The San Juan Islands are subjected to more than enough over- flights out of Whidbey. ALL ACTIVITY IN SOUND WATERS SHOULD BE MINIMIZED AND AIRCRAFT SHOULD BE ROUTED OUT THE STRAIT WITHOUT VLYING OVER POPULATED LAND. TRAINING ACTIVITY BEYOND 100 MILES OF SHORLINE IS ACCEPTABLE, BUT SHOULD NOT INCREASE ABOVE CURRENT LEVEL.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island. Under the proposed action flights would not increase over the San Juan Islands.
Steele	I am a former US Navy officer, but I still object to extension of the Northwest Training Range. Constant military overflights disrupt the entire environment. Pre-emptive closures will further depress commercial activities. Learn how to train for peace.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Stehn-01	My principle concerns are the expansion of disruptive activities in our unique, sensitive marine and adjacent environments and the effects of sonar on whale populations. At the Grays Harbor College presentation some of my questions were answered, re spotters on the lookout for whales, etc.	It must be acknowledged that ASW activities have been conducted without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy ASW operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.
Stehn-02	2) But already we are disturbed by jet flyovers, although we accept the inevitability of training exercises having to occur somewhere.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Stehn-03	3) But what would the cumulative effect of a great increase in training exercises be to our rural, resource and tourist based area which achieves its unique status by reason of the lower 48 state's longest undisturbed coastline, the free running rivers and rain forests, the shorelines and waters of the Straight of Juan de Fuca and the natural preserve of the interior Olympic National Park?	All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.
Stehn-04	4) Another issue, perhaps not central to the environmental impact but of great importance is, given the current defense status of the US (notable military superiority compared to other countries) how much new, super sophisticated capacity do we need? Perhaps the effect of this is more important as an economic boost to military contractors, suppliers, etc. Given that the current economic problems are very likely to be ongoing and future predictable shortages of petroleum plus the effect of military activities on climate change are problems which must be addressed sooner than later, shouldn't we be exploring avenues of peaceful conflict resolution and military developments which do not require large amounts of precious fuels and other resources? In the predictable future, let's hope that our military can gear itself more to smaller scale conflict resolution and peace keeping rather than capacity for huge, questionable exercises such as our current situation in Iraq. I am not	This comment has been duly noted.

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	'anti-Navy,' (our family hero was my uncle, the late Commander Wm. O Turnbull and through him we became aware of the varied vital functions the Navy fulfills) but this is a changing world and the above problems must be addressed.	
Stein	The Navy should be free to test and deploy as it sees fit subject only to statutes limiting discharge of pollutants into navigable waterways. Deployment of its air and sea resources should be unfettered by any other restrictions along the coastal waterways of the Pacific from the Mexican border to the North Pole. In this time of war, nothing should inhibit the Navy from training and developing new weapons systems and new formations that can protect our country from the all to real threats from the sea and the sky. The final EIS should be exempt from further NEPA challange.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Stephens	It is unacceptable that the public and marine life in the ocean will be subjected to various sonar and aviation noise, target noise, surface ship noise, weapons and target noise, and underwater explosions. The Navy admits that marine life will be harmed but harming our food supply, (fish like salmon), or the whales is not deemed important by the Navy, as they are expendable according to the EIS. This is UNACCEPTABLE AND I OBJECT AND REQUEST THAT THIS NOT BE ALLOWED TO HAPPEN.	This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its effects. All health and safety issues are discussed within Section 3.16; Public Health and Safety. Impacts to salmon are discussed in Section 3.7; Fish, please see the respective Sections for complete analysis.
Stites	No! Period! No!	Comment Noted.
Stokes, L.	Research results are clear that sonor negatively impacts whales. Our seriously endangered orcas deserve respect and consideration, not human-introduced sounds in their environment that put them at risk.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from midfrequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Stokes, M.	Pollution, noise, erosion, disturbance of ecosystems, air quality all are a concern when military training takes place in any area. We don't know the long term effect of sonar on our sea mammals, amy of which are fragile and some on the endangered species list. My family and I oppose any escalation of military training along our coast line.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Stone-01	We oppose the Navy's plan to expand testing for new weapons systems, including advanced sonar and sinking depleted uranium munitions into the ocean.	The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed. Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's

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		Proposed Action.
Stone-02	We worry about sonar's harmful effects on orcas and other marine mammals. Orca experts tells us that hearing loss leads to almost certain death for dolphins and orcas. Because Puget Sound's orcas are already endangered, we hope the Navy will choose not to endanger them even further.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Stone-03	We support the No Action Alternative. This expanded testing involves too many unanswered questions and too many proven adverse impacts. Please help protect Puget Sound, a body of water on which all of us on Whidbey Island depend.  Thank you.  Diane and Greg Stone 6452 Longwood Lane Clinton, WA 98236	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Stonebraker	Please do not enlarge the training exercises in area or time. I believe we need to do all we can to protect oceanic species instead of further endangering them.	This comment has been duly noted.
Stout	Extend the comment period for the proposed testing, and overall stop the testing. We need to protect our environment, particularly the plants and animals, water quality and air quality including our auditory environment. The ocean life needs to be protected and so far the Navy has shown no respect for the other forms of life on our planet. This disrespect and destruction needs to stop. The military cannot be unlimited in power and influence, if they plan to fulfill their true role of fulfilling their public service instead of creating weapons which we may never need. Our attention needs to be elsewhere besides the creation of weapons and destructive technology. If the military truly wants to participate in the creation of a just society, then they should lead the way in peacetime with efforts grounded in cooperation and community, not technology of destruction.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  This comment has been duly noted.
Stratton	I am very concerned about the wildlife on the pacific coast. We have a large whale population and their communication and unpolluted food supply is already compromise. I am sending this as a objection to the proposed training program on the Northwest Coast. We need an extension of time for further investigation. Many of these animals that will be affected are on the endangered species lists already. In the Puget Sound Region this year we have already lost 7 whales in one season. This is unheard of in the history of the whale watching here.  Please do not continue with this without further public input and more environmental studies. Thank you for your heartfelt listening.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

ID	Issue Text	Response Text
	Stratton	
Streicher	I object to the planned Northwest Training Complex. I accept and support the need for training. However the training areas should be restricted. I am in no position to say what the areas should be but including all the coastal waters of Washington, Oregon and part of California is not acceptable.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Stroble	I totally object to the use of sonar in Puget Sound or the Strait of Juan de Fuca. I also totally object to the use of marine mammals to detect or disarm or in any other way interact with explosive devices. I also object to the use of Wilderness Areas or National Parks, or the airspace above them for the use of training exercises.	The use of marine mammals in underwater detection activities is not being considered in this EIS/OEIS and is being handled within a neighboring range complex EIS/OEIS.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.  Sonar is not being conducted within the Puget Sound.
Strong-01	To Whom it May Concern,  1) I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted underwater detonations training and mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Strong-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Strong-03	3) The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.

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Strong-04	4) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Strong-05	6) Other points I feel need addressing are these: There is a lack of information available to assess the impact of a) radioactivity, b) heavy metals, c) explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies.
Strong-06	6) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Strong-07	7) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Strong-08	8) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Strong-09	9) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary. thank you.  Marilyn Strong	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural

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		uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium."
		The Hanson abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies." A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the past use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
		(Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.)
Sullivan, C.	Please reconsider increasing training flights that already fly, sometimes low level, over Skagit Bay. The noise can be nerve racking and very disturbing. We came to live near the Bay for peace and quiet in this otherwise hectic, loud and fast paced world. Our pets are easily spooked by the jet engine noise that comes on quickly with an almost burst then planes begin a turn to Whidbey Naval Air, turn on afterburners or some engine that sounds like it goes in reverse, does a touchdown then another burst of power (noise) and goes around again.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Sullivan, M.	Step back, as if you were viewing this plan from space, and take a look. What do you think of it now? To me, it looks absurda blind, destructive frenzy in the name of defense. It harms creatures and their environment, triggers counter-reactions from other countries, wastes many millions of dollars that could be spent on true securitysuch as a healthy environment, job training and unemployment benefits, and health care, to name just a few things. Destroying in the name of defense makes no sense.	This comment has been duly noted.
Sully	We object to any and every finding that adversely affects the use and	This comment has been duly noted.

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	enjoyment of our property on the Oregon coast.	
Sumski	I urge the US Navy to refrain from conducting any training exercises off the Pacific coast of the US that would negatively impact the fish and mammals that reside in its waters. Preserving our fragile ecosystem here on the West Coast is hugely important worldwide. Please do not conduct sonar tests or any others that would harm our magnificent ocean creatures. Thank you.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Svensson	This statement is in support of a healthy environment for marine mammals and all sea life. Military strength is to used to protect and uphold our country and its people. This by extension includes the animals ecosystem with which we live. Due to the decline in numerous marine species and the lack of information available to assess the impacts of the Navy's proposed expansion on those species, especially with proposed testing of new systems and inadequate marine mammal monitoring, a "No Action Alternative" is the preferred option.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
T.	I strenuously object to the proposal which I've seen to increase naval training in our region. I appreciate the need for training, at one level of analysis, but to do so by putting waters, aquatic inhabitants, and human residents in proximity at risk seems to be counterintuitive. Please re-evaluate and do not increase war-like activities in our region. Thank you.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Tack	Nothing is more precious than our freedom and liberty. The U.S. Navy has been, in large part, the "giver" of that freedom and liberty since the days of John Paul Jones. The threats to this nation and our way of life grows daily. Unfortunately, most Americans are blind to this threat. Navy training is absolutely necessary in order to preserve America. I fully support this training range expansion and am urging my neighbors to do so also. Tom Tack	Thank you for your input.
Talbott	As a former Navy Ship senior design Contractor and after a lot of years being around the Navy and as an Idaho resident and being familiar with how the Navy does business; I find no areas of concern with Naval training in the areas designated. Rather, this type of training for our young people is mandatory in light of the Global Islamic Jihad threat to our way of life and our freedoms as Americans. The Navy can be counted on to adhere to its parameters as designated. Blessings, Rabbi James Talbott, the wilderness Moreh	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Tallman	I am very concerned about the use of the coastal waters of northern Oregon as a site for testing Naval weapons. We have an increasingly fragil ocean ecosystem here. Already our local areas are disrupted by changing ocean temperatures, extreme weather that impacts traditional currents, overfishing, and pollution. Please don't subject our fish and fauna to any additional stress!!	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

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Tarr	I am writing to register my concerns about the Navy's Northwest Training Complex off the coast of Oregon.  Because of the inadequate notice and time provisions for public input, I have had to prepare my comments in haste. I would request that an extension be made to better allow citizens to study the EIS and make more considered contributions to your planning process.  My chief concern is the effect of mid-frequency high decibel sonar on whales and other sea mammals. The navy's own studies have shown these soundwaves to cause injuries and strandings. It seems likely to cause interruptions in feeding an migration more subtle to observe, but nevertheless significant in the viability and quality of life for these sentient creatures. Your provisions to not use such sonar when whales are known to be in the area are inadequate. The sound waves produced travel great distances and it is inconceivable that you could know whether whales are present at such distances. Much damage could be done in areas of the ocean which are simply too large to adequately observe.  Also, it seems completely reasonable to assume that such high decibel sound production would have effects on fish and other mammals which are heretofore unknown.  The proposed area for the NW Training Comples is known habitatand in some cases critical habitat for 7 endangered species and 2 threatened species of marine mammals. To proceed with proposed activities in such a sensitive area is not responsible stewardship.  I am also concerned that the EIS has made no mention of the Oregon National Wildlife Refuge, an area of extremely important habitat for shorebirds. Increased flyover activity and the possibility of fuel spills and other debris could have a significant negative impact on these animals which are already stressed due to the pressures of global warming phenomenon and habitat loss.  Please consider my respectful comments and reconsider this proposed activity.  Thank you, Linda Tarr	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Tasseff	I am in ABSOLUTE OPPOSITION to the expansion of this training range. The potential damage to the ecosystem of Puget Sound and its' inhabitants is incalculable. I will lend my voice and my support to any group with a unified hand in blocking this proposal.  Respectfully, Christine Tasseff	Comment noted.
Taylor, Madeline	If we want this fragile planet to be safe and beautiful for our children and grandchildren, we cannot be spreading toxins around. Warfare testing harms the delicate web of life that affects all of us. I lovingly but firmly OPPOSE warfare testing ANYWHERE! Let's put our considerable talent to use	This comment has been duly noted.

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	preventing and resolving conflict without warfare.	
Taylor, Marcus	I live six miles north of Winthrop on the Chewuch River in North Central Washington. My family and animals are subject to Prowler fly-bys at near eye level less that 200 ft above the homes below me. I suggest to you that this practice is unsafe and endangers citizens and animals and needs.	With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
	Please amend your practices to address public safety.	
Taylor, Margaret	I support the no action alternative in the Northwest Testing Range Compexies Draft EIS.	
	I am very concerned about the impact underwater testing would have on the waters off of Whidbey Island.	
	I am opposed to the navy using spent uranium in its testing anywhere and doing underwater testing that could harm the hearing of aquatic creatures, particularly whales.	
	It is the US governments responsibility to protect our precious waters. Thank you.	
Taylor, Rose	Dear US Navy:	The proposed action includes no testing of new weapons, but rather the
	You're duty is to protect the American people from all enemies foreign and domestic. You should think twice before expanding your testing program, which if history is any proof (Falon, Nevada, Vieques, Puerto Rico and many other weaponry testing sites) then it looks like instead of protecting the American people you will actually be assaulting them with these deadly cancer causing chemicals. Your superiors must already know what these weapons can do so why continue to explode them? They only cause many Americans including children much harm, sickness and death.	training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.
	Please be part of the good guys and protect us and our beautiful nation and start demanding answers to our concerns.	
	Sincerely,	
	Rose Taylor Californian and an American	
Teague	I strongly urge you to reconsider your new flight pattern. As a resident of Lopez Island, I am deeply effected negatively by the noise pollution that currently echos from the navy jets flying lowly over the island. Many residents on the island feel strongly about how much the noise pollution impacts us each time the flights go overhead. Please reconsider the flight pattern to not include the San Juan Islands fly overs. Thanks for your consider.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
	mislade the carriotative by evere. That we for your constant.	Under the proposed action flights would not increase over the San Juan Islands.
Teal	DO NOT INCREASE NAVY TRAINING ACTIVITY IN WASHINGTON While I recognize the need to maintain military readiness through training, I support the "no Action Alternative" due to the decline in	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
	numerous marine species, effects of depleted uranium on our environment, and the lack of information available to assess the other environmental and	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the

ID	Issue Text	Response Text
	social impacts on our communities.	Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
		Effects of past, present and planned Navy activities have been discussed in Chapter 4; Cumulative Impacts.
Tenneboe	Where has the sanity gone in this Country? Life as we know it, has become the experiments of an Industrial Military Complex that is out of control. NO, HECK NO to this insanity.	This comment has been duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
	The "weapons" (experimental, both new and old) will be used (most of which you do not even list) on PEOPLE, Animals, Wildlife, Insects, Trees, Grass, Soil, and every living and non-living creature and creation. It may utterly kill and detroy everything in your designated "Warning" region of California, Washington, Oregon and Idaho and/or have repercussion effects on these areas as well as our entire Country.  Inshore and offshore detonations may or may not be considered hazardous – however, until a complete listing of these chemicals is provided to the public there can be no public discussion of their hazard to public health, marine life, wildlife, public drinking water sources or our oceans.  This land and people are OUR land and people, and you have no right to use our land, and our people as your Guinea Pigs.  NO! HECK, NO! Stop the insanity.	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the resources listed below. Section 3.1 Geology and Soils Section 3.2 Air Quality Section 3.3 Hazardous materials Section 3.6 Marine Plants and Invertebrates Section 3.7 Fish Section 3.9 Marine Mammals Section 3.10 Birds Section 3.11 Terrestrial Biological Resourcees Section 3.16 Public Safety
Theberge	Referring to Northwest Training Range Complex Environmental Impact Statement  I am very concerned about both the economic and safety impacts on commercial fishing from the use of portable undersea tracking range and underwater training minefield. Any material left underwater is an entangling hazard for fishermen towing gear. This creates a severe safety hazard, can result in the loss of expensive fishing gear, and loss of valuable fishing grounds. The economic impacts could be particular severe if combined with the impacts of proposed wave energy parks and marine reserves (no fishing zones proposed by environmental organizations). Care must be taken to place all such activities outside of commercial fishing areas. Commercial fishermen organizations should be involved with planning where these training activities take place.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS. Section 3.14. Impacts to commercial fishing has been analyzed within Section 3.7, Fish.
Thomas-01	I am another citizen that is in favor of the No Action Alternative Plan in the Northwest Testing Range Compexies Draft EIS. Are we so removed from the understanding that we are totally connected to the earth?	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Thomas-02	How can we really say we are protecting our land when we consider deploying uranium weapons in fragile environmental ecosystems & when we chance to harm aquatic life with sound waves? I urge you to think to the	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to

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	future and abandon the thinking that the ends justify the means because that is certainly not true.	describe that depleted uranium use is no longer included in the Navy's Proposed Action. We recognize your concern but would like to reassure you by informing you that the U.S. Navy has conducted sonar and underwater detonation activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar or underwater detonation training exercises in the NWTRC.
Thomerson	The proposed range covers the Olympic Coast National Marine Sanctuary off Washington State. Although vaguely specified, this is an unacceptable intrusion into valuable public waterways with unspecified damage potential. I oppose it.	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Thompson, A.	this is preposterous! have you never heard of environmental stewardship? LEAVE THE LAND LIVABLE FOR OUR FUTURE!	This comment has been duly noted.
Thompson, C.	Hello. I am writing in regards to the proposed sonar testing off the coast of Washington. I am very much against such actions, and believe that that harm to marine mammal wildlife including the endangered Orcas whale populations is far to much of a risk as compared to the reward for military training. It is time we move beyond such actions that are destroying national treasures! Please stop now in the name of protecting this country and all that is has to offer. You can do better than this. Sincerely, Cole Thompson Resident, Seattle, WA	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS.
Thompson, K.	In Respect of the US Navy,	This comment is duly noted. The decision on which alternative to pursue
	The Native American's refer to a question. 'What is the impact of our actions, 7 generations from now?'	will be considered by Navy representatives following the review of all relevant facts and impact analyses.
	How can we stop this heady ocean demonstration, I ask, what can be done. If you know will you tell me?	
	We on this planet are interdependent, and have a natural cycle, I believe that the bombing and sonar testing will be damaging to the animal's, likely plants, then the people and the planet as a whole. We are the sum of the parts of the whole. Even some trees cannot grow properly in the forest without the salmon running.	
	May the native american wisdom that we now stand on the shoulders of, wisen the U.S. Navy, where my father served in the 40's.	
	May you make us proud, because you heed and serve a greater vision for us	

ID	Issue Text	Response Text
	all. Sincerely, Kate Thompson	
Thornburg-01	I have just learned that you plan to deliver depleted uranium, test new weapons underwater, and explode underwater charges in a marine sanctuary. This cannot be happening when so many animals count on us to protect them in a sanctuary. Why should I spend my tax money on your new weapons? Your current weapons are all I need, thank you. Stop these tests! Stop this uranium!	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.  The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Thornburg-02	You have not given me any justification for all this destruction in the EIS, which I have read carefully.	
Thunen	The last thing the California coast needs is sonar and war games. The navy's plan would be detrimental ecologically, and economically, considering the majority of the funding for this part of the county comes from the tourist industry. It's a terrible idea, and not necessary.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
Thurlow	I am opposed to the passage of any plans by the US Navy to increase it's land and water areas for target practice or use to test weapons of war, be it defensive or offensive practices.  The intention of making war and the attention placed on the use of weapons of war creates the reality of war, which I am adamantly opposed to.  Furthermore, the US Navy must meet the requirement of public hearings as mandated by existing law for EIS statements. Our armed forces are not above the law.  Thank you.	The Navy is not proposing to test any new weapons or sonar in the Northwest Training Range Complex, nor is it proposing to expand the range complex. Only flight testing of unmanned aerial systems is proposed. The proposed action calls for continued training of Navy personnel with established weapons systems, similar to what has been conducted in this same area since World War II.  The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Thwaites	During the last 7 years I can not count the number of times our government has said that we live in a "post 9/11 world." I take this to mean that we are fighting terrorism.  My comment concerns the fact that the proposal to expand training activities does not contain the slightest explanation of how these training activities would relate to suppressing terrorism. Instead the proposal has a Cold War ring to it.  So far as I know, there has been not a single terrorist threat to the northwest, certainly none that would require forces in addition to the Coast Guard. We	This comment is duly noted. The Navy provides forces that fight terrorism. Those forces need to train. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.

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	have never been advised of terrorist submarines, terrorist fighter planes, terrorist landing craft or anything of the sort that might require a naval and air force response.	
	It seems to me that the Navy has two interests: (1) Give the impression that the Navy is a good environmental steward, and (2) perpetuate its continued existence by providing "defense." But defense against what threat? No answer to this question has been provided so far.	
	Therefore I urge the denial of the Navy's request to expand its training range and activities in the Northwest. I would suggest instead that current activities of the sort described be discontinued. A good argument for my recommendation also could be made in terms of unnecessary spending during the current economic crisis.	
Tilton	As residents of the Oregon coast, we are very concerned about the unknown environmental consequences of expanding use of the naval training range off	The NRDC comment submittal for the NWTRC EIS/OEIS has been responded to and included within this Appendix.
	of our coast.  We have read the comments submitted by the Natural Resources Defense Council regarding your proposal to expand the use of the Northwest Training Range Complex off the Oregon coast. We completely agree with their analysis, comments, conclusions, and recommendations.  Of special importance to us is for the Navy to immediately adopt the recommended exclusion areas for sonar in the Northwest Pacific.  Sincerely,  Mark and Robin Tilton  Florence, Oregon	It must be acknowledged that ASW activities have been conducted without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy ASW operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.
Titus	I live in an area that is under the pattern for NAS Whidbey. At times the noise is loud and bothers us, however the flight training is for one basic thing, our freedom, and the lifes of the pilots/aircrews. I LOVE THE SOUND OF FREEDOM. Today to many people think only of two things, their wants, and the dollar. They lose track of times past, and people like Hitler. We need to do everything we can to keep our military the strongest, best, and safest units we can. Do what needs to be done, and do not listen to the people who only think of themselves.	Thank you for your comment.
Todd	This program is an outrage to the creator of this world, humankind, and ocean life. This fight for supremacy on this planet must stop or all will perish. You, your children, your grandchildren and all that you value will be gone. This is only one of many programs in the name of war that must stop. When we value life and health for all peoples and species of this planet we will answer the call that we first came in existance to answer. Please stop this program. To maim and kill whales and dolphins in order to better be able to kill other human beings is a part of a great sickness that dominates humankind.	This comment has been duly noted.
Tracey-01	I am a private U.S. citizen deeply concerned about the fragility of marine wildlife around the globe. I learned from the Orca Network's website of the	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all

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	Navy's proposal to expand the NW Training Range and I was shocked to see that the proposed areas of expansion include whale migration routes and key habitats for marine mammals and salmon. The devastating impact of underwater explosions on marine life is unconscionable and unacceptable in the 21st century. I urge the Navy to accept the "No Action Alternative" and redirect any training expansion needs to less environmentally sensitive areas and by eliminating the practice of underwater detonation.	relevant facts and impact analyses. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Tracy-02	you've got my support, you guys rock thanks for being there if and when we need you.	Thank you for your comment.
Treadwell	YOU ARE LIARS. YOU WASTE TAX PAYER MONEY ON UN NEEDED SYSTEMS. YOU PROTECT DEFENSE CONTRACTORS AT THE EXPENSE OF THE REPUBLIC. DON'T DESTROY OUR WATERS SO YOUR BUDDIES CAN STAY IN BUSINESS. CORRUPT BASTARD, PROPAGANDISTS IS WHAT YOU ARE. LIARS LIARS LIARS NO CREDIBILITY AT ALL. YOU ARE WASTE AND FRAUD.	This comment is duly noted.
Trenshaw	I am in favor of the "No Action Alternative" in the Northwest Training Range Complex Draft EIS.  Please do not bring harm to the Sound and its inhabitants, in the name and illusion of "protection."	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Trevillion	I live in the navy's flight training path. The noise level at present is very high(ie, one can't be heard above it in conversation and when it's really bad, domestic animals cower or panic). This has to be having a profound effect on the estuary of the Skagit River where I live; its wildlife, surely. There is already an exceedingly long public record of complaint, as well. Any increase in noise level is unthinkable.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Trim	We request a 3 week extension on the comment period due to the web site problems (i.e., being down) and the holiday conflicts. thank you.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Turner, C.	Pls don't do the testing and explosions in the sea that hurt our friends the whales and dolphins.	This comment has been duly noted.
Turner, D.	Your test are endangering the environment. I realize they are done for defense, but does the risk o the future warrant it. David Turner	This comment has been duly noted.
Uglesich	I do not support an increase in training activities within the Northwest Training Range Complex. Please select the "No Action Alternative". Thank you.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Vandaveer	We need our military forces to be prepared, and training missions are a	This comment is duly noted. The decision on which alternative to pursue

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	necessary part of proper preparation. I support the increase in frequency of these missions, even over the airspace of our county, which is in close proximity the the naval base. Freedom is not always free, but paid for by the commitments of our outstanding military.	will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Vanderheiden	The ocean is the home of fish we eat. It supports our weather patterns; it is where transportation occurs; it affects our wild life like polar bears, seals and dolphins to name only a few popular species. These animals belong to everyone. The waters support coral which supports other life forms.  You know all this. When damage is caused to the oceaneverything, every person, and all life is affected. That is why many call the ocean, Our Mother.  PLEASE do not allow any conduct weapons testing and sonar blasts in any ocean. My home is in the Northwest near the Pacific.  Thank you, Donna	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
VanDerzee	I strongly oppose any further training practices that harm those creatures that may be closest to humans in intelligence dolphins and whales. There is simply no reason for expanding the harm already done to God's creation.	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Varieur	I am shocked and dismayed that the Navy would even consider continued use of sonar training exercises in the Puget Sound region, given the historical trauma to the Orca, and the scientific evidence of fatal brain trauma to whales and dolphins immediately following sonar testing on both coasts. The absolute lack of concern and respect for the ecosystem and her inhabitants reveals a complete lack of foresight for all of our futures.	The Navy disagrees and in fact complies with all applicable environmental laws, including NEPA and its requirements. The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Vawter	With all that the new government to doing for clean air and better living conditions it seems contrary to be allowing the Navy to be using our waters for experimental testing using highly toxic chemicals. It is of greatest importance that the "people" of this government be allowed to speak before any kind of testing in done in our area to impact our environment. That is the reason I moved to this area to be less surrounded by such pollutants. thank you for your kind attention to these dangerous and far reaching consequences of military action.	This comment has been duly noted.
Veatch	Dear Sirs or Madams, It is clear to me that this sonar testing is detrimental to marine wildlife. They cannot cover or plug their ears. Thank you for this opportunity, Steve Veatch	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

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		there is little relative risk to marine mammal populations from mid- frequency active sonar training exercises.
Veirs-01	Please accept these comments on your draft environmental impact statement. I believe that your environmental assessment is severely lacking in assessing the ways that Navy operations create threats to the endangered Southern Resident Orcas. And, the draft EIS omits steps that the Navy could take to protect this endangered population.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca. The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Veirs-02	My recommendations on steps the Navy can take to protect the Southern Resident orcas are: 1. The Navy should monitor the location of the Southern Resident orcas whenever they are outside of the opening to the Strait of Juan de Fuca and report the location to the public with no more than a 24 hr delay between sighting and reporting.	The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Veirs-03	2. The Navy should reduce the power or shutdown Navy SONARs whenever orcas are within acoustic range - defined as received levels of SONAR pings estimated to be greater than an appropriate threshold such as 120 dB re 1 microPa rms at the location of the orcas. This is to apply in the ocean and wherever the Southern Resident orcas happen to be. (When the USS Shoup went by my hydrophones [5/5/2003] received levels were in excess of 140 dB re 1 microPa rms.) 3. Similarly, the Navy should refrain from creating underwater explosions when orcas would experience received levels as in item 2 above.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Veirs-04	4. If the Navy does not know the location of orca whales then the Navy should refrain from noise generation by loud SONARs and by explosions. Night SONAR use and night explosions should only be permitted if the Southern Residents are known not to be in the area.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological

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		impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The proposed action of this EIS/OEIS does not include the use of sonar for training within Puget Sound, Haro Strait, or the Strait of Juan de Fuca.
Veirs-05	5. The Navy should refrain from operating aircraft, fixed wing or helicopters, directly over orca whales whether they are in the ocean or in the inland waters of the Strait of Juan de Fuca or Puget Sound. The goal is to not create loud airborne sounds that can propagate straight down and into the waters where there are orcas.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate. Propogation of noise from aircraft has been analyzed within Section 3.9 – Marine Mammals.
Ventura-01	The NW Training Range Complex should not be furthered and the following questions should be answered fully for the public immediately: 0) have chemtrails seen over the past year in the San Francisco Bay Area been related to this program?	This comment has been duly noted. Potential impacts from Navy activities were discussed within the Draft EIS/OEIS according to contemporary scientific standards. Contrails associated with military and commercial aircraft were not discussed within the Draft EIS/OEIS due to the absence of a nexus between activities and impacts.
Ventura-02	1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year? 2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Ventura-03	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Ventura-04	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.
Ventura-05	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website.	The Navy's primary jet fuel is JP-5.
Ventura-06	6 - A complete study of depleted uranium showing human health and animal health effects.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Ventura-07	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity). 8 - Toxicity of Red and White Phosphorus - humans, wildlife, soils, water	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.

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	supplies, marine life.	
Ventura-08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
Ventura-09	10 - How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed action does not require any state cleanup of training areas described in the EIS/OEIS. Please see Section 3.3; Hazardous Materials and Wastes.
Ventura-10	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Ventura-11	12 - Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Ventura-12	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military? A rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake along with the human health effects and dead marine life.	No.
Vickerman	I live on the Oregon Coast. I look forward to seeing the US Navy practicing off our coast. GO NAVY Ralph	Thank you for your comment.
Vieira	We are opposed to your plans for a Northwest Training Range. We are going in the very direction that President Eisenhower warned Americans not let come to pass. Well, we are deep into a military frame of mind. We need to scale back this impetuous desire for war and strife. We need to get along in this world and not find everything a threat to our security. Our security is weaken by our stance for more weapons, more wars, more confrontation. You can't beat the world into submission to our will. Stop trying to control the world and the world will look a lot friendlier	This comment has been duly noted.
Vileisis	March 10, 2009 Naval Facilities Engineering Command Northwest 1101 Tautog Circle Suite 203 Silverdale, WA 98315-1101 Attention: Mrs. Kimberly Kler = NWTRC EIS Dear Mrs. Kler: , I wanted to add a few additional comments to those I submitted on behalf of the Kalmiopsis Audubon Society on February 19, 2009. Scientists have recently determined that the trend of ocean acidification will change the way that underwater sound behaves. According to researchers, there will be reduced low frequency absorption, increased noise levels and potentially higher stress for marine mammals. ( See Keith C. Hester, Edward T. Peltzer, William J. Kirkwood, and Peter G. Brewer, "Unanticipated consequences of ocean acidification: A noisier ocean at lower pH," Geophys. Res. Lett. 2008, 35, L19601; David Browning,	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard

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	"Acoustics Meets Global Warming: The impact of ocean acidification on underwater sound," American Physical Society, 2008 Joint Fall Meeting of the New England Sections of APS and AAPT, October 10-11, 2008, abstract #B1.002.) This is not only a question for the future as researchers have already determined that upwelling of waters in southern Oregon and northern California has already brought acidified waters on the continental shelf in this region, which corresponds with the southern reaches of the NW Training Complex. (Richard A. Feely, Christopher L. Sabine, J. Martin Hernandez-Ayon, Debby Ianson, Burke Hales, "Evidence for Upwelling of Corrosive "Acidified" Water onto the Continental Shelf," Science 13 June 2008:?Vol. 320. no. 5882, pp. 1490 - 149. We believe this variable of increasing acidity and higher potential stress for marine mammals needs to be addressed in the EIS, in the near term and also in the long term. We are also additionally concerned about the potential for hazardous waste being left in our offshore waters. Marine ecologist James Porter, associate dean of the Odum School of Ecology at the University of Georgia, who recently completed a research trip to Vieque, determined that cancer causing chemicals were in marine creatures in the vicinity of Navy testing sites in excess of 100,000 times what is considered safe for commercially edible seafood. (http://www.cnn.com/2009/TECH/science/02/26/undersea.munitions.cleanup/index.html) We are concerned not only about the safety of our local fishery based economy, but also about the repercussions of such toxins in marine ecosystems. We believe that the matter of hazardous waste needs also to be addressed in light of the increasing corrosiveness of ocean waters. Finally we are concerned that there is insufficient information about the timing and location of testing to make determinations about the impacts of these activities on marine mammals. Thank you for considering our comments. Sincerely, Ann Vileisis President Kalmiopsis Audubon Society P.O. Box	our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.  All water quality issues have been discussed in Chapter 3, Section 3.4 – Water Resources.
Vinson, J.	I'm Having "Heartfelt Concerns" over what i have heard about this expanding plans for "weapon's Testing" on our Coast oceans, also testing in the air,also on the land in the Pacific Northwest! Please do something to put a stop to it. Its "Insanity" and so many reasons not to allow it. I wounder if you ever visited our coast of Mendocino? Or Oregon? My family have been here for over 50 years, so you see our roots are buried here. My concerns are many, just a few: Environment, our Food Chain, Jobs, The loss of use of coastal access. I think you will understand why I'm upset! Sincerely Mrs Joyce M. Vinson	This comment has been duly noted.  Effects of past, present and planned Navy activities have been discussed in Chapter 4; Cumulative Impacts.
Vinson, D01	I'll start off by saying I wish you would decide against Your proposal to Expand new plans for weapons testing in the air and on land in the Pacific Northwest. We Have the Disabled who enjoy there time at our Beautiful Coast .	This comment has been duly noted.
Vinson, D02	We Have our Fisherman who make a living at fishing. We have all the tourist business that depend on the tourist. As a person who has worked and was certified in Hazardous Waste Clean up ( EPA) I would want to be in any water that was being tested with new test options, Much less eat fish that came	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.

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	from the water. If you continue this , I truly believe that it will destroy our coast.	
Vinson, D03	We are a rural Community but we should still count. It makes me mad that this was not brought to our attention for opinion sooner. Sincerely, Debby Sue Vinson (EPA)(construction)(caregiver) (sister-Helper to Handicapped)	The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of: Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. A summary of these scoping meetings is included in Appendix F of the Draft EIS/OEIS.
Vissers-01	TO WHOM IT CONCERNS: I AM DOING MY BEST TO COMMENT ON YOUR US NAVY EIS BUT THERE ARE SO MANY UNCLEAR POINTS THAT IT IS DIFFICULT TO RESPOND CLEARLY OR KNOW JUST WHAT IS INTENDED OR TO BE THE EFFECTS OF THIS PROJECT. PLEASE READ THE FOLLOWING COMMENT AND ANSWER ALL QUESTIONS BELOW. 1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year?	Chaff response- 1 and 2) As discussed in Chapter 3.x of the Final EIS/OEIS, all of the components of the aluminum coating are present in seawater in trace amounts, except magnesium, which is present at 0.1 percent. The stearic acid coating is biodegradable and nontoxic. Components leached from the chaff will be diluted by the surrounding seawater, reducing the potential for concentrations of these chemicals to build up to levels that can affect sediment quality and benthic habitats.
Vissers-02	2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Vissers-03	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No.
Vissers-04	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.
Vissers-05	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels.	The Navy's primary jet fuel is JP-5.
Vissers-06	6 - A complete study of depleted uranium showing human health and animal health effects.	The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. As noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium." The Hanson

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		abstract also noted that "uranium is decreasingly concentrated along the aquatic food chains terminating in predatory fish, such as salmon or trout. These are the major human food sources of interest, and are minimally affected from released DU." It should also be noted that uranium does occur naturally in major water areas of the world and that "most, if not all, of the anticipated additions of DU munitions will have little or no impact upon major water bodies."
		A 2004 study conducted by Catherine Toque for the British Ministry of Defense focused on the effects of DU on the marine environment where approximately thirty-one tonnes of depleted uranium were deposited during weapons testing between 1982 and 2003. The survey showed that there was no evidence of DU in any of the samples (sediment, seaweed/algae, or seafood) collected. The study determined that members of the public were not exposed to any radiological hazard as a result of use of DU in the marine environment. As such, the use of DU in the NWTRC is not likely to expose marine life in the NWTRC or humans consuming seafood from the NWTRC to any radiological hazards.
Vissers-07	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Vissers-08	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Vissers-09	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
Vissers-10	10 - How much money will Washington , Oregon , California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Vissers-11	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well. 12 - Studies of the synergistic effects of project chemicals on bio-accumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Vissers-12	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military?	No.
Vissers-13	IF THERE IS TO BE ANY IMPACT ON THE HEALTH AND WELL BEING OF MARINE AND/OR HUMAN LIFE DUE TO THIS PROJECTWHICH I BELIEVE THERE IS A GREAT DEAL OF RISK AND HARM TO BE MADETHIS PROJECT MUST STOP AND BE FULLY REVIEWED IMMEDIATELY. THIS COMMENT PERIOD WAS FAR TOO BRIEF AND THE IMPACT OF THESE ACTIVITIES NEEDS FURTHER CLARIFICATION AND	Effects of past, present and planned Navy activities have been discussed in Chapter 4; Cumulative Impacts.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed

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	ELABORATION. GIVEN THE Environmental Impact Statement AS WRITTEN, I DO NOT AGREE WITH THE CONTINUATION OF THIS NAVY TESTING PLAN IN ANY WAY. FROM WHAT I CAN SEE FROM THIS STATEMENT THE NW TRAINING RANGE COMPLEX IMPACTS WILL REACH FAR BEYOND THE BOUNDS OF THE TESTING SITES THEMSELVES AND LEAD TO IRREPLACEABLE WOUNDS AND DESTRUCTIONS OF THE PRECIOUS HUMAN AND MARINE LIFE IN THIS UNIQUE AND DELICATE REGION. THE HARMFUL EFFECTS FAR OUTWEIGH THE BENEFITS AND THIS AREA-ESPECIALLY AROUND AREAS OF WHIDBEY ISLAND AND THE OLYMPIC PENINSULA HAVE BECOME TOO DENSELY POPULATED TO BE USED FOR SUCH ACTIVITIES ANY MORE.	within Section 3.16; Public Health and Safety.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Vogelpohl	Under no circumstances, in no way should any branch of the United States Military be allowed to drop one ounce of depleted uranium weapontry on any part of the planet Earth. My husband served 4 years in the Navy, I am an Air Force Brat, my daughter served 7 years in the Air Force and my father was a retired staff sargent. My son-in-law serves in Korea today. Bear in mind that depleted urantium will not go away, it will kill and maim all who come into contact and to proceed with this plan would be an error so grave as to cause me to believe that this country is not only becoming some form of pro-Nazism but that it is becoming a land that need not exist in it's present form. This economic bad time will become a distant memory of a country that no longer exists. Do not proceed - do not end the USA - do not commit this act of treason.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Vollmar	I am strongly opposed to the training exercises scheduled for the west coast and Puget Sound area. Active sonar can confuse and terrify marine mammals and ultimately lead to their deaths from beaching. We have resident orcas, an endangered species, located within the Puget Sound. They need to be protected. Please do NOT proceed with training as this may lead to extreme loss of an important species. The navy will be held responsible!	The proposed action includes no sonar testing, but rather the training of Navy personnel with established systems.  The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Vosoba-01	I am in favor of the "No Action Alternative".	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Vosoba-02	I oppose the Navy's testing of depleted uranium anywhere.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's

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		Proposed Action.
Vosoba-03	I oppose underwater tests that might damage the hearing of marine mammals, who's numbers are declining and need our protection.	The Navy recognizes your concern but would like to reassure you by informing you that the U.S. Navy has conducted sonar and underwater detonation activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from midfrequency active sonar or underwater detonation training exercises in the NWTRC.
Wadsworth-01	TO WHOM IT CONCERNS:  I AM DOING MY BEST TO COMMENT ON YOUR US NAVY EIS BUT THERE ARE SO MANY UNCLEAR POINTS THAT IT IS DIFFICULT TO RESPOND CLEARLY OR KNOW JUST WHAT IS INTENDED OR TO BE THE EFFECTS OF THIS PROJECT.  PLEASE READ THE FOLLOWING COMMENT AND ANSWER ALL QUESTIONS BELOW.  1 - Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year?  2 - What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Wadsworth-02	3 - Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No weather modification programs exist.
Wadsworth-03	4 - Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)?	Only reasonable scientific impacts have been discussed in this EIS/OEIS. Contrails occur as a function of environmental conditions. Typically, flight above 30,000 ft in altitude is required for contrail formation. Those conditions can be met in the NWTRC.
Wadsworth-04	5 - A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels.	The Navy's primary jet fuel is JP-5.
Wadsworth-05	6 - A complete study of depleted uranium showing human health and animal health effects.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.

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Wadsworth-06	7 - A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.
Wadsworth-07	8 - Toxicity of Red and White Phosphorus – humans, wildlife, soils, water supplies, marine life.	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Wadsworth-08	9 - A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of obscurants which will be used in these programs and their toxicity.	These items are included in Section 3 in various subsections. Obscurants are not proposed for use in this EIS/OEIS.
Wadsworth-09	10 - How much money will Washington , Oregon , California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100%.	The proposed activities, which take place outside of Oregon and California, will have no negative impact to water quality, air quality, or sediments to any state. Therefore, no costs are expected.
Wadsworth-10	11 - A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes cumulative and synergistic effects as well.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Wadsworth-11	12 - Studies of the synergistic effects of project chemicals on bio-accumulation in fish and other marine food supplies.	The analysis of hazardous materials in Section 3.3 includes a complete look at all the materials, taken as a whole, and individually.
Wadsworth-12	13 - Will Maxwell MOAs (1, 2 & 3,) be used in this Navy Project? If yes, what will be the actions taken over this area by all branches of the military?	No. There will not be other branches operating.
Wadsworth-13	IF THERE IS TO BE ANY IMPACT ON THE HEALTH AND WELL BEING OF MARINE AND/OR HUMAN LIFE DUE TO THIS PROJECTWHICH I BELIEVE THERE IS A GREAT DEAL OF RISK AND HARM TO BE MADETHIS PROJECT MUST STOP AND BE FULLY REVIEWED IMMEDIATELY. THIS COMMENT PERIOD WAS FAR TOO BRIEF AND THE IMPACT OF THESE ACTIVITIES NEEDS FURTHER CLARIFICATION AND ELABORATION.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	GIVEN THE Environmental Impact Statement AS WRITTEN, I DO NOT AGREE WITH THE CONTINUATION OF THIS NAVY TESTING PLAN IN ANY WAY. FROM WHAT I CAN SEE FROM THIS STATEMENT THE NW TRAINING RANGE COMPLEX IMPACTS WILL REACH FAR BEYOND THE BOUNDS OF THE TESTING SITES THEMSELVES AND LEAD TO IRREPLACEABLE WOUNDS AND DESTRUCTIONS OF THE PRECIOUS HUMAN AND MARINE LIFE IN THIS UNIQUE AND DELICATE REGION. THE HARMFUL EFFECTS FAR OUTWEIGH THE BENEFITS AND THIS AREAESPECIALLY AROUND AREAS OF WHIDBEY ISLAND AND THE OLYMPIC PENINSULA HAVE BECOME TOO DENSELY POPULATED TO BE USED FOR SUCH ACTIVITIES ANY MORE.	
Wahl-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that

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		there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from midfrequency active sonar training exercises.
Wahl-02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic. And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.  Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
Wahl-03	3) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond Feb. 18, a paltry one-week extension you recently granted!	The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.

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Wahl-04	Other points I feel need addressing are these: 4) There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.
Wahl-05	5) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
Wahl-06	6) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Wahl-07	7) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Wahl-08	8) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic

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		uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium."
Wahl-09	9) Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.  The Navy will base its ultimate decision on this scientific analysis.
Wainwright	I support the "No Action Alternative" because of the proven and possible	This comment is duly noted. The decision on which alternative to pursue
wallwiight	adverse impact of the purposed expanded activities at the North Whidbey Island facility.	will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Walker, S.	The military is making a mistake using the fragile coast of Washington, Oregon and Califormia for its training. We have many endangered species that will be impacted by the training. Our coastline itself is fragile. I demand that this training be stopped.  Susan Walker	The NWTRC EIS/OEIS complies with all applicable environmental laws., including NEPA and its requirements. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any uanavoidable impacts of the proposed action.
Walker, V01	I would like to see widespread information being given out to ALL whom are going to be affected by this expansion, with substantial amounts of information about the chemicals and such that will be inflicted upon us during these tests. It is not your right to put our safety and health in danger for warfare testing grounds.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's
		proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
		With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Walker, V02	The reason that I have chosen to live in the northwest is because of the healthy environment that it provides. By extending your "training range" to	To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the

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	include the ENTIRE state is ridiculous. Not to mention the surrounding states. There are testing sites that are set aside for the types of things that are mentioned in the document, where people, the environment and the food supply will not be damaged.	NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. Also, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Walker, V.& C.	My husband and I fully support whatever training ranges you need to keep the men and women of the U.S. Navy experienced and trained. They should have everything they need and we know that the Navy will us the area in a responsible way. Thank you for your service!  Verna & Charlie Walker	Thank you for your comment.
Wallace-01	1) I am in favor of the "No Action Alternative" in the Northwest Testing Range Compexies Draft EIS;	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Wallace-01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Wallace-02	I am completely opposed to your proposed training range expansion. I feel that you are trying to sneak this terrible idea by by not making in public.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The Navy has complied with all NEPA notification requirements. The scoping period for the Northwest Training Range Complex (NWTRC) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) began with publication of a Notice of Intent on July 31, 2007. The scoping period lasted 60 days, concluding on September 29, 2007. Five scoping meetings were held on September 10, 11, 12, 13, and 15 in the cities of:

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		Oak Harbor, WA; Pacific Beach, WA; Grays Harbor, WA; Depoe Bay, OR; and Eureka, CA respectively. A summary of these scoping meetings is included in Appendix F of the Draft EIS/OEIS.
		Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Wallace-03	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Wallace-04	I want to know what chemicals you plan to use, what weapons you plan to test and what independent evaluation has to say. Whatever you are trying to do, STOP IT NOW or until the public has has sufficient time to comment and the information given has been reviewed by an independent panel.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Many of the Navy's actions require regulatory permits from other governmental agencies. As part of the permitting process these agencies conduct independent reviews of the Navy's actions.
Wallace-05	3) The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans. It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the

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		impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium."
Wallace-06	4) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).
		Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."
		(i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:
		(A) Hull integrity tests and other deep water tests;
		(B) Live firing of guns, missiles, torpedoes, and chaff;
		(C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and
		(D) Anti-submarine warfare operations.
Wallace-07	5) Another issue: access to the EIS documents was off-line/unavailable from Jan 15-21 (15% of the Public Review Period). Also, the primary online comment mechanism was down from Dec. 29 to Jan February 5 (86% of the review window!). Please, in fairness, EXTEND the review deadline beyond	The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.
	Feb. 18, a paltry one-week extension you recently granted!	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.

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		The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.
Wallace-08	6) Other points I feel need addressing are these: There is a lack of information available to assess the impact of a) radioactivity, b) heavy metals, c) explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of new systems that so far lack essential public information.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.
Wallace-09	7) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
Wallace-10	8) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Wallace-11	9) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Wallace-12	10) The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
		The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface . Those particulates would not normally be created when the round impacts the water and are not

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		created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium."
Wallace-13	2) I oppose the Navy's testing of depleted uranium weapons anywhere;	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Wallace-14	3) I oppose the use of underwater tests that might damage the hearing of whales and other aquatic life or cause other harm to them;	The Draft EIS/OEIS is a product of environmental scientists and biologists contracted to produce the independent analysis you recommend. The Navy—in compliance with NEPA—managed this process, but the analysis and recommendations have been produced by experts in their respective scientific communities.
Wallace-15	4) I oppose invasive testing of any kind in an underwater sanctuary;	The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Wallace-16	5) I oppose testing of any kind without independent environmental impact research; and	The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.  The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Wallace-17	6) I oppose testing without viable citizen oversight of environmental compliance.	Civilian oversight and control is in fact a foundation of the U.S. military. As Commander-in-Chief, the President of the United States, a civilian, makes ultimate decisions about the training and operations of all U.S. military forces.

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Wallace-18	I urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.	The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Wallin-01	Dear U.S.Navy, I regards to the proposed expansion of the Navy training exercizes, we strongly urge you to take the No Action Alternative.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Wallin-02	To support life the Pacific ocean, and the people whom it sustains, the effects of depleated uranium and sonar on mammals can not be tolerated. We must find a way to train our great Navy that is not detrimental to Life in America. Thank-you for your consideration. Sincerely, Janet Wallin	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS to describe that depleted uranium use is no longer included in the Navy's Proposed Action.
Ward, R.	I am amoung the thousands of Whidbey Island residents who tolerate the Nave presence in Oak Harbor and in the noisy skies over the north end of our otherwise peaceful island, but would prefer that the Navy reduce it's footprint worldwide - NOT expand. And we certainly do not approve of the prospect of a training range complex in our delicate Marine reserve.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The proposed action does not include 'testing' of weapons either, we are training with weapons and platforms already tested in other complexes and ranges.
Ward, W.	Thanks for reading this.I'm 100% against this action of using up to apox. 126,000 sq. miles(for Navy training),on the Still living( sea life is under exstream stress,The fishing industry can't even fish a regular season ), waters of our NW.coast.IT is only alive as much as it is now.Because there has been Navy ect. training there,since WW2.The WHALES our just holding	Comment noted.  The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting

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	on,the Stress to them from all the above and under water activity(radio,sonar,gun,missle,rocket firing will bring the to there end!!!!!!!! Plus all the other life forms!!!! Thanks! 100 % AGAINST	training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.
		The U.S. Navy has a responsibility to serve as a good steward of the natural environment. We demonstrate that commitment by investing millions of dollars annually in programs that enable us to minimize, and in some cases eliminate, the effects of our operations on the environment while carrying out our ongoing national defense mission.  The fact that the Navy is a seagoing force, and that two-thirds of the world's surface is covered by water, means that many of our environmental initiatives focus on ocean stewardship and seek opportunities to control our "ecological footprint" in relation to marine life, coastal impacts, and water quality. We have installed technology aboard our ships to keep plastics out of the ocean and safely manage our biodegradable waste stream. We are a world leader in marine mammal research, and are funding approximately \$26 million annually in marine mammal-related research projects from fiscal years 2007-2009. We serve as the executive agent for the Department of Defense Coral Reef Task Force. Major ocean stewardship efforts can be seen in our comprehensive approach to managing effects on marine life for all of our training ranges and operating areas. That environmental planning documentation is being coordinated with the National Marine Fisheries Service.  In addition, the U.S. Navy has programs in place to manage threatened and endangered species on and around our installations; safely clean up past hazardous waste sites for future reuse; explore and develop new, greener technologies for equipment design and maintenance; and recycle metal, wood and glass. Navy installations and ship's crews frequently partner with local communities on volunteer shoreline and neighborhood cleanup projects.
Watson, Maggie	I do not want you to test weapons off our precious shoreline in Mendocino. I want you to stop making weapons all together and find alternative methods of solving problems. The USA is the bully in the playground and that is not ok. Testing the weapons will endanger the sea life, especially the whales.	This comment has been duly noted. The southern boundary of the OPAREA is at 40° N latitude, which corresponds to the northern boundary of Mendocino County in Northern California. Therefore, Mendocino County and its coastline are outside of the range complex.
Watson, Michael	I write to urge that the continuing Navy weapons test program in the state of Oregon be suspended on a permanent basis. I further urge that the proposed expansion of the program of Navy warfare testing in the waters of the western United States not take place. The marine mammals that have been and will be 'taken'killed by these activities of the Navy deserve better treatment than this. Marine mammals are highly evolved, thinking, feeling beings, very similar in many respects to ourselves. They should not be treated as 'objects' that can be dispensed with at our convenience.	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Watts	Please do not use any sonar blasting exercises around marine	All potential effects to Marine Mammals are discusssed within Section 3.9.

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	life especially mammals. These mammals are part of the ecosystem and have been here 50,000 years. We must protect our environment for the next generations to come. Also, please do not dump anything of nuclear waste in our oceans. I think this is just common sense. Thank you.	The Navy has considered all possible effects within this EIS/OEIS.
Weber	Please honor all species as sacred and do not deploy weapons in the ocean. All creatures are from God and must be honored and cared for. To kill animals is to kill part of usThankyou	The Navy complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062.
		The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Wehner-01	To whom it may concern, I have been going to bed with the sound of low flying airplanes, breaking the sound barrier, going over San Juan Island and have woken up to the same sound in recent weeks. I'm really against more training over San Juan Island. We, as many others, moved here for the clean air and quiet surroundings. Both is now endangered, with more training happening over our heads.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.  Under the proposed action flights would not increase over the San Juan
		Islands.
Wehner-02	It makes our island less attractive to tourists, our livelihood. There is a greater chance of accidents. It bothers wildlife and humans alike. Please leave our island in peace and quiet. Thank you for your time. Stephanie	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Wehrly	I FULLY SUPPORT the proposed expansion of the Northwest Training Range Complex project including the increase of training sorties from NAS Whidbey.  DSW	Thank you for your support, however, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
		The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. There will be no increase of takeoffs and landings as a result of the proposed action. This is because each takeoff and landing from NAS Whidbey allows for personnel to perform multiple activities once the aircrew transits to the training area. Therefore, while training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS

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		Whidbey Island.
Weibel-01	Will there be atmospheric testing along with over-flights & bombing runs? Will weather modification be used?	There will be no atmospheric testing or weather modification. Proposed activities are listed in Chapter 2.
Weibel-02	I oppose weapons' testing on such a large scale (expanding to 3 other states including large areas of the Pacific Ocean), borderless experimentation on people, flora, and fauna.	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
Weibel-03	I object to the short comment time, the absence of notification through the mass media, and the absence of statements of our elected officials. I object to having our air, water, and soil contaminated through hazardous, toxic, & radioactive materials by the Navy, Air Force, and other branches of the DOD.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Weibel-04	Under the Freedom of Information Act I request a complete list of all the procedures planned, amounts and names of materials planned to use, noise & electronic levels recorded, and its health effects on people, plants, and animals.	Freedom of Information Act requests are handled separately from the NEPA comment process.
Weibel-05	Will CHAFF be used?	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Weibel-06	Will there be sonic booms? How will Electronic Combat Training affect our health?	The Navy is unaware of any research linking small underwater detonations to earthquakes. In fact, in Frequently Asked Questions to the U.S. Geological Survey (USGS), the USGS stated that "even huge amounts of explosives almost never cause even small earthquakes." (http://earthquake.usgs.gov/learning/faq.php?categoryID=12&faqID=88&nextRow=next)
Weibel-07	How will the climate be affected?	The climate will not be affected.
Weibel-08	You do not disclose when these tests are to begin and when they should end. How much will the states get reimbursed for waste disposal & clean-up?	The proposed activities have no specific end date. However the EIS/OEIS will be reviewed every 5 years for substantive changes.
		The proposed action does not require any state cleanup of training areas described in the EIS/OEIS. Please see Section 3.3; Hazardous Materials and Wastes.
Weibel-09	What are the cumulative, synergetic effects on bioaccumulation?	The potential impacts of hazardous materials resulting from the Navy's activities were described in Section 3.3 of the Draft EIS/OEIS.  The Final EIS/OEIS contains enhanced information concerning the fate and transport of materials, which describes the lack of potential for

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Weibel-10	Please extend the comment time, & hold hearings in all counties.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR. Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Weibel-11	This ocean is 1 of 4 places on earth with significant upwelling, the rising of nutrient-rich waters from the ocean bottom to the surface. The upwelling makes the region one of the world's most productive ecosystems for marine life. Furthermore California is one of the most productive agricultural states in California. As a mother, teacher, landowner, and taxpayer I am requesting that California will be excluded from this project. I refuse to be used as a guinea pig for your war industry. Why use weapons of mass destruction on the US population? When will other states be used?	This comment has been duly noted.
Weiner, J.	We've all seen the dead marine mammals dead from sonar testing we know that most marine mammals that we share our planet with are dwindling in population. How many have we tortured and maimed in addition to the deaths from sonar testing? It is very short-sighted and selfish of our military to kill these animals just because they want to test their weapons. Certainly we can figure out something that is kinder to the planet, to the animals we share the planet with! You are not doing it for me as a tax payer. I am totally against the sonar testing.	This comment has been duly noted.
Weiner, S.	This note is express my shock how we are planning for our future the complete disregard for human ours and others health, welfare and environment. The thought of the US Navy destroying our most precious lands is outrageous the act, itself, would be criminal in my mind!	This comment has been duly noted.
Wells	I think the Navy should start looking less like the environmental disaster we have seen them as over the last few years and (1) STOP using (so called) depleted Uranium. EVERYWHERE IMMEDIATELY. Send it back to Hanford and never use anything like that again. The seafood you eat at Whidbey NAS might be less radioactive.	Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action.

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	(2) Stop using active SONAR and learn to use the passive systems you have. The endangered Orcas and other sealife would benefit by this.  (3) See what you can do to reduce your carbon foot print. Everybody else is. You can probably contribute more than we can.  There's more, but I wonder if this will even be considered. I look forward to the day when you will have to meet our approval or we will deny your funding and when we will all have the schools and healthcare and roads and community we really need and mostly want. My NJROTC commander talked about the huge oceans between us and (potential adversaries). Let's not spoil these oceans any more than we already have.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. In fact, many populations of non-ESA and ESA species alike have been increasing in the NWTRC OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Werner	I disagree with the whole premise of all this testing. Why do we have to keep spending money on building up our war arsenal? Is someone planning on invading us from outer space? Why don't we use our resources to protect and improve the environment and peoples lives.	This comment has been duly noted.
Wheeler, L01	I support a "no action alternative" to the proposed expansion of naval marine activity in the Washington and Oregon coastal waters.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Wheeler, L02	I am concerned about the environmental impact, particularly of expanded sonar use that damages whales and other marine life, and of introducing depleted uranium, which has hazardous radioactive properties, into the ocean.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. Complete analysis of potential marine mammal effects are discussed within Section 3.9 of the EIS/OEIS. Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the
		Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Wheeler, M.	No! Horrible idea. No No No.	Comment noted.
White, P.	Collapse of fisheries, bee colonies and endangered species are all conditions that have been - and will be - accelerated by unmitigated, attacks, literally, on the coastal ecosystems. The weather itself is in fragile condition and munitions, pollutants, petrochemicals, nitrates and nitrates, oxides, metals, and activities that are designed to destroy life forms or at least practice that destruction will in all probability have a damaging effect on the immediate areas of impact and by temporal and elemental extension, later effects upon vastly greater areas of the land and ocean. Please, in that warfare is increasingly obsolete, a waste of money, energy and human and	The NWTRC EIS/OEIS complies with all applicable environmental laws., including NEPA and its requirements. The Navy has developed, refined, and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any uanavoidable impacts of the proposed action.

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	other life, do not permit any expansion of training and testing areas. In fact, we are all best served by dismantling the systems and facilities that are now in place. Thank you.	
White, K01	I am deeply concerned about potential SONAR and violent underwater explosions from munitions as hazards for marine life near Washington shores, in a marine sanctuary, no less.	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
White, K02	2) Another concern is depleted Uranium being introduced wholesale into water and seabed to spread radioactivity to marine life, some of which people eat. The Navy needs to research and quantify the presence of currently existing radioactive spent munitions (depleted uranium) from it's past activities in ocean areas and establish current levels of those materials in fisheries, fish, and other marine fauna. Safety relative to human consumption of fish taken from Range fisheries, and human activities in those areas must be researched and assured. In general, it is the height of contradiction to assert that war-practice activities are compatible with the purposes of a marine sanctuary.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.  The primary exposure pathway from exposure to depleted uranium is from inhalation after DU particulates are re-suspended in the air following the impact of a DU round with a hard surface. Those particulates would not normally be created when the round impacts the water and are not created simply by firing the round. Rounds that are on the ocean bottom would soon become covered with encrustation or buried in the ocean bottom. It should be noted that, as noted in an abstract prepared by Wayne C. Hanson, of the Los Alamos Laboratory, in regard to the consequences of DU in Aquatic Ecosystems, "DU released to the environment in expended munitions will consist of the relatively nontoxic uranium compounds, which will be less soluble in water than natural uranium because of their alloy properties," and that "DU in various ecosystems will behave as natural uranium, but with lower solubility and without the serious consequences of 236RA that normally accompanies unrefined uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to

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		public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
White, K03	3) The same concern goes with heavy metals being introduced into the waters, passing up the food chain to threaten the health of large mammals and of humans.	The Draft EIS/OEIS thoroughly analyzes the impacts of expended materials used during Navy training activities. Section 3.3 of the Draft EIS/OEIS describes the impacts from the perspective of potentially hazardous materials such as explosives constituents. Section 3.4 describes the impacts of expended materials in terms of water and sediment quality.
White, K04	4) It is inaccurate to average potential pollutant concentrations out over the entire expanse of the huge range complex, making levels seem benign, since local concentrations around spent munitions would be far more toxic.	Data does not exist to quantify how many depleted uranium rounds may be on the ocean bottom in the NWTRC. There are only a handful of surface combatants either stationed in the Pacific Northwest or that utilize the NWTRC for training that use depleted uranium (DU) rounds. Those ships have infrequent training requirements with the gun system that used those rounds. The area in which the gun systems would have been used is very large since there is no single area where the guns would fire during training. As such, the area where the rounds would have been deposited is very large. While it might be technically feasible to show where the small quantity of rounds that lie in deep ocean waters are located, the costs and the effort involved would be exorbitant.
White, K05	5) And using areas like the Marine Sanctuary for testing "because it's close and cheaper" is not a sufficient rationale to pollute and disturb a preserved area.	As listed in Section 3.6.1.4 of the EIS, the sanctuary's management plan guides the activities and sets the goals of the sanctuary, including reducing threats to its resources and ensuring water quality appropriate for those resources (MPAC 2008). The OCNMS EIS was completed in November 1993, and recognized the prior use of the sanctuary for a variety of Navy training activities (OCNMS 1993).
		Olympic Coast National Marine Sanctuary (OCNMS) lies within the Study Area addressed in this EIS/OEIS. Per OCNMS regulations (15 CFR §922.152(d)(1): "All Department of Defense military activities shall be carried out in a manner that avoids to the maximum extent practicable any adverse impacts on Sanctuary resources and qualities."
		(i) Except as provided in paragraph (d)(2) [bombing within the sanctuary], the prohibitions of this section do not apply to the following military activities performed by the Department of Defense in W–237A, W–237B, and Military Operating Areas Olympic A and B in the Sanctuary:
		(A) Hull integrity tests and other deep water tests;
		(B) Live firing of guns, missiles, torpedoes, and chaff;
		(C) Activities associated with the Quinault Range including the in-water testing of non-explosive torpedoes; and
		(D) Anti-submarine warfare operations.

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Jan 15-21 (15% comment mecha	Another issue: access to the EIS documents was off-line/unavailable from a 15-21 (15% of the Public Review Period). Also, the primary online nment mechanism was down from Dec. 29 to Jan February 5 (86% of the iew window!). Please, in fairness, EXTEND the review deadline beyond	The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.
	Feb. 18, a paltry one-week extension you recently granted!	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
		The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.
White, K07	7) There is a lack of information available to assess the impact of radioactivity, heavy metals, explosions, and intense sonar on numerous endangered and declining marine species, especially with proposed testing of	The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training areas/ranges.
	new systems that so far lack essential public information.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
White, K08	8) There is a need for independent updated research on the seasonal presence of marine mammals, fish and birds found in the training ranges rather than currently relying on outdated surveys.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
White, K09	9) The Navy needs to provide the public with access to non-classified ambient acoustic information in the training ranges as a baseline to confirm compliance with operations and comparison with initial sonar equipment specifications.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
White, K10	10) The Navy needs to have demonstrated a means to respond to a maritime incident in all areas including interactions between ships, commercial vessels, and wildlife migrations.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Whitlock	Hello, I am opposed to an expansion of the naval military exercise training range in the Northwest. This proposed expansion has the very potential to lead to environmental degradation (regarding introduction of foreign and toxic materials and substances), and harm to wildlife. Please consider my strong and deeply heartfelt opposition to expanding the Northwest Training Range Complex. Thank you. Berd (360) 259-4291	This comment is duly noted. As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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Environmental Voices (Whitman)- 01	Environmental Voices is apposed to any programs that would release toxic chemicals and heavy metals into the environment, water/soil/air or harm our environment in any way.	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below.  Section 3.2 Air Quality Section 3.3 Hazardous Materials Section 3.4 Water Resources Section 3.5 Acoustic Environment (Airborne) Section 3.11 Terrestrial Biological Resources
Whitman-02	Environmental Voices is requesting that the U.S. Navy and the Department of Defense cancel all of their plans to expand Warfare Testing in California, Oregon, Washington and Idaho for the following reasons: 1) Toxic Chemicals will affect human health, destroy marine life, algae (our primary source of oxygen), trees (our second source of oxygen), agriculture and wildlife by polluting our water, soil and air. Chemicals that will be used like aluminum, depleted uranium, white phosphorus and others are deadly. We have to stop polluting our environment with toxic chemicals.	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Whitman-03	Sonic testing in the Pacific Ocean may trigger earthquakes causing death and devastation.	All reasonable scientific theories for potential impacts have been considered within the EIS/OEIS. There is no sonic testing in the NWTRC and this would not be enough to trigger seismic activity.
Whitman-04	3) The public was not properly notified of the public hearings. Only 5 public hearings were held in small towns that most people haven't even heard of and that have a small population. Hearings should be held in the large capitol and other large cities. California hearings should be held in Sacramento, San Francisco, Los Angeles, Long Beach, San Diego as well as smaller cities along the Northern California Coast because the ocean current of toxic soup will eventually reach Southern California shores and cause destruction to marine life, etc. 4) The public was not properly notified about the public comment deadline to respond to the EIS.	The Navy regrets the lack of website functionality from January 16 to January 21. The website was fully functional on all other dates of the comment period. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy determined public hearings locations based on areas with the most potential in impacts from the Navy's proposed actions and population centers in those areas. Like many areas that are outside the geographic range of influence for the NWTRC, Mendocino County libraries were not chosen as locations for placing the EIS/OEIS.
Whitman-05	<ul> <li>5) Legislative representatives were not properly notified. All members of the U. S. and State Legislature should be notified. They should then notify the public.</li> <li>6) Legislative representatives have not had time to review the (EIS) and make comments.</li> </ul>	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
Whitman-06	7) Not all of the toxic chemicals and heavy metals have been properly disclosed. We are requesting a list of all the toxic chemicals that will be used by the U. S. Navy, U. S. Air Force and any other branch of the Department of Defense as part of these warfare testing programs be disclosed. The affects	Please refer to the following section of the Draft EIS/OEIS for the environmental impacts from hazardous materials. Section 3.3 Hazardous materials Additionally, expended materials are discussed throughout each resource

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	of using these toxic chemicals and heavy metals on humans, animals, wildlife, marine life, and the environment should also be disclosed.	section
Whitman-07	8) The EIS fails to identify all of the air quality, water quality and soils impacts of their programs.	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below. Section 3.1 Geology and Soils Section 3.2 Air Quality Section 3.4 Water Resources
Whitman-08	9) The major media (television, newspapers, radio, etc.) were not notified to inform the public of public hearings and comment deadlines. Environmental Voices would like to be notified at (916) 595-7197 about any future public hearings regarding the Environmental Impact Statement (EIS) to expand warfare testing in California, Oregon, Washington and Idaho. We request to be notified by telephone where we can send a formal letter and provide more documentation about the health and environmental affects of expanding this program. We are requesting more public hearings in major cities and the capitols of each state involved and states near the states listed above. We are also requesting to extend the final filing for comments at least 6 months to allow Environmental Voices and other groups we represent time to review the EIS and prepare a written response with documentation. Under the Freedom of Information Act, we are requesting a complete listing of all chemicals that will be used during these testing programs. I look forward to hearing from a member of your staff regarding our requests and notifications of public hearings. Sincerely, Deborah J. Whitman (916) 595-7197	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  An additional meeting was held in Tillamook, OR on February 26.  As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The proposed action includes no testing of new weapons, but rather the training of Navy personnel with established weapons systems. Only flight testing of unmanned aerial systems is proposed.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Whitman-09	We opposes any action at this time and we are requesting that you extend the comment deadline for 90 days and host more public hearings in the capitols and major cities in the states that your programs will be conducted as well as neighboring states. Announcements of such meetings and the extended comment deadline date should be made to the public through media and newspaper advertisements. This will allow our organization and others time to review the EIS and other related documents as well as attend the public hearings.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website. To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Whitman-10	Please add Environmental Voices to your e-mail list and notify us of any public herings and updates relating to this program. Our e-mail is environmentalvoices@yahoo.com.Environmental Voices is also requesting to tour your Navel Training Compleses so that we would become better informed. Please contact me at (530) 792-7054 or environmentalvoices@yahoo.com and let me know what we need to do to schedule a tour.  Deborah J. Whitman, President Environmental Voices (530) 792-7054	This comment is duly noted.s. Your information will be added to the distribution list.
Whitney	Fundamentally, I am opposed to "sonar testing" expansion. The US Navy has	The U.S. Navy has conducted mid-frequency and high-frequency active

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	existing designated areas near the US for testing; plus the rest of the World's oceans with no apparent restrictions. As an adjunct alternative, conduct lab testing. Focus on less harmful detection and communication systems throughout the oceans, not only to protect our fellow mammals, but to inculcate "Respect the Beach and Ocean" into the military services. I did notice the focused impact on the entrance to Puget Sound and the North Coast of Washington, Oregon and California with potential harmful effects on the gray whale migration, orcas and other marine mammals.	sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
		The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).
Wicklund	This proposal is outrageous. It effects our food, air, water, living conditions, and who knows what else. I my family has been part of the Navy since WW11 and I can't imagine what on earth you are thinking! I am absolutely opposed to this. There aree plenty of locations where people wouldn't be effected. Go use them!	The Navy feels very strongly about protecting our natural resources and in fact complies with all applicable environmental laws, including NEPA and its requirements. The purpose of this EIS/OEIS is a complete analysis of all environmental resources within the NWTRC; This comment has been duly noted.
	Thank you	
Wielandt	I understand that we must as a country practice night flying to protect our security, but can we please limit the time to 9:00 p.m. at the OLF.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Concerns over flight times must be discussed with Whidbey Island scheduling.
	We have a 6 year old who goes to bed at 8:30 p.m. and an 11 year old at 9:00 p.m. Both attend Coupeville schools and need a good nights rest.  Flying at 10:30 p.m. is not conducive to good grades.	discussed with Williams Island Scheduling.
Wiest	Please extend your deadline of March 11th for the public awareness of the western states environmental impact statement. It is extremely important for ALL of the public, of an area that will be impacted, be aware, able to comment, and their voices be heard and considered. It is the right of every American citizen. Thank you.	To ensure the public has ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Wildmoser-01	1) I am writing to you as a very concerned citizen who lives on the coast of Oregon.  I have reviewed some of the Navy's DEIS/OEIS  WWW.NWTRangeComplexEIS.com Their plans for the Oregon coast are quite alarming.  My biggest concern is the Navy plans to use both mid-frequency and high frequency sonar in the coastal waters; these have a history of injury to marine mammals.  In litigation in California against the Navy, the Navy itself has estimated that its California sonar drills would disturb or injure 170,000 marine mammals and cause permanent injury and possible death to more than 450 whales, as well as temporary impairment in at least 8000 others. What does the Navy	1) In regard to SONAR concerns, the U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises. This EIS/OEIS uses a method for calculating exposures to underwater sound that was developed jointly by the Navy and the National Marine Fisheries Service. This method appears to more accurately depict the probability of a response to mid-frequency active sonar. See Section 3.9 for a more complete discussion on sonar and its

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	estimate for injury in Oregon waters?	effects.
Wildmoser-02	2) Apparently there isn't a 12-mile offshore limit to the Navy's proposal. In fact, one of the Navy personnel said that if they need to do shallow water training, their proposal allows them to do it. This will deal another blow to the commercial fisherman here in Brookings vastly decrease the whale-watching dollars and profoundly disturb the rural life we have chosen here in Brookings.	The locations and levels of Navy training in the Northwest Training Range Complex are expected to continue as they have since World War II. The potential economic impacts—including impacts to fishing and whale watching—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting these industries.
Wildmoser-03	3) The Navy needs to rethink and abandon large parts of this entire proposal. The potential effects of new and increased military activity off the coast of Oregon could result in a general degradation of the natural environment, be fatal to wildlife and detrimental to the human quality of life. And contrary to the best interests of the tourism industry and coastal property values.	This comment has been duly noted.
Wildmoser-04	4) I am asking you to hold additional public hearings in Oregon with at least two weeks notice in papers, radio stations, and TV both in Portland, cities in the Willamette valley, and the coastal towns.	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.  Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts. As described above, the potential impacts of the proposed action of this study are deemed to be minimal in Skagit County.
Wildmoser-05	5) Publish details laymen can understand on the a) 12-mile offshore limit, b) statistics on the negative effects on tourism, the fishing industry, c) mammal deaths.	These questions have been answered within: a) 12mile offshore area; Chapter 2, b) tourism and fishing; Socioeconomics, 3.14 and Fish; 3.8, and c) mammal deaths are handled in Marine Mammals; 3.9.
Wildmoser-06	6) Please consider my requests and allow the local population to influence the outcome of the Navy's plans. WE are the ones who will live with all the possible negative consequences. And unfortunately, many marine mammals may be gone.  Kind regards, Lynn Wildmoser	This comment has been duly noted.
Wiley	I am writing on behalf of orcas and the overall health needs of their deteriorating environment. I can support the No Action Alternative but only if the local scientists and public are given the right to access the nonclassified ambient acoustic information. The preference	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.

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	deep in my heart would be for no war games, manuevers or testing in Puget Sound.	This comment has been duly noted.
Wilhite	As a resident of rural southern Oregon, I agree and express the following comments:  - Inadequate notice preventing meaningful public participation  - NEPA requires public review process  - Only one meeting in Oregon, inadequately noticed (no state-wide newspaper publication)  - Please, I ask for the NAVY to reopen public comment period to allow meaningful review.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  An additional meeting was held in Tillamook, OR on February 26.
Wilkerson, C.	As someone who has lived in western Washington most of her life, I understand the importance of security at military installations. My husband is newly retired from the shipyard where he worked on Naval vessels of all kinds for 30 years. That said, I am firmly against any expansion of using marine animals in a larger area of the west coast. First and foremost, no matter how you try to justify it, these animals are not your private property under the laws of nature. Just because they CAN be trained to patrol and alert their keepers to potentially harmful intruders, etc., doesn't mean they SHOULD be exploited to work in ever increasing numbers and areas. War games are not for sea creatures.	Marine Mammal training is not part of this proposed action.
Wilkerson, P.& L01	We are very much against the Navy's plan to expand its Puget Sound activities down the coastline to California, including such activities as air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures, underwater training minefields, surveillance & reconnaissance operations and unmanned aerial systems operations, et al, in areas from our coastline to beyond the 12-mile territorial limit, which would further contaminate and affect the seabed and waters, and the air quality, and the health and lives of marine life due to toxic heavy metals and radioactivity and other pollutants, causing wholesale ill health, mutations and even death to such marine life, on up the food chain to birds, animals and humans who depend upon marine life for food. We do not believe your estimate of the reported low numbers of pollutant concentrations as a result of such activities, as it is counter-intuitive to logic and truth, and such pollutants will, without a doubt, detrimentally affect all life. Sonar has already affected & even killed sea mammal life and adding more sonar activities is unconscienable. Such activities will also interfere with (and in many cases, destroy) the habitation of sea life in this area, and impede the natural migration paths, as well as contaminate the area. We do not want a simulated war zone on our coastline. We call for you to abide by the will of the people and to not create a plague in this area which will, with certainty, cause its destruction.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  Discussion of heavy metals is discussed under Section 3.3.1.1; Hazardous Materials.  The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  This comment has been duly noted.

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Wilkerson, P.& L02	We are very much against the Navy's plan to expand its Puget Sound activities down the coastline to California, including such activities as air combat maneuvers, missile and gunnery exercises, antisubmarine warfare exercises, electronic combat exercises, mine countermeasures, underwater training minefields, surveillance & reconnaissance operations and unmanned aerial systems operations, et al, in areas from our coastline to beyond the 12-mile territorial limit, which would further contaminate and affect the seabed and waters and air quality, and the health and lives of marine life due to toxic heavy metals and radioactivity and other pollutants, causing wholesale ill health, mutations and even death to such marine life, on up the food chain to birds, animals and humans who depend upon marine life for food.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.  All water pollution concerns of Navy actions are handled in Section 3.4 and all air pollution concerns are dealt with in Section 3.2. All cumulative effects of Navy activities within the range of influence are handled under Chapter 4- Cumulative Impacts.  With respect to public health and safety issues, the Navy complies with all best management practices and mitigation measures to protect the public from Navy training activities. All health and safety issues are discussed within Section 3.16; Public Health and Safety.
Wilkerson, P.& L03	We do not believe your estimate of the reported low numbers of pollutant concentrations as a result of such activities, as it is counter-intuitive to logic and truth, and such pollutants will, without a doubt, detrimentally affect all life. Sonar has already affected & even killed sea mammal life; adding more sonar activities is unconscienable. Such activities will also interfere with (and in many cases, destroy) the habitation of sealife in this area, and impeded the natural migration paths, as well as contaminate the area. We do not want a simulated war zone on our coastline. We call for you to abide by the will of the people and to not create a plague in this area which will, with certainty, cause its destruction.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.  This comment has been duly noted.
Williams	May I wish the United States Navy well in it's training. If one does not train, you are dooming yourself and your organization to failure. For the sake for the nation, TRAIN! If it takes bigger area, more time, fuel or munitions, have at it! There are many areas of the country that are now parks, industrial areas and housing that were forts, stations, bases and the like. Now they are used for other things with it's former military use a mere shadow of what it was.  The Williams Family wishes the Navy well with its quest to increase training off the OR Coast, heck, we would pay to go watch it! Train hard now, bleed less latter.  Sincerely,  Craig, Tracy, Cooper, Carson and Chloe Williams (P.S. We are not active or retired military.)	Thank you for your comment.
Williamson, E.	As a marine educator and a resident of the Oregon coast, I would like to express my opposition to the Navy's plan to expand the range of its underwater testing program. I have spent a lifetime trying to educate children about the fragility of the marine environment, and while my main concern is the impact that this plan may have on marine mammals, I am also concerned about the impact of debris, or perhaps unexploded ordinance, on the beaches and intertidal regions of out state. I understand the need for military	This comment is duly noted. The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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	preparedness in the modern world, but I feel certain there must be some area that is less sensitive than is our coast. Thank you for the opportunity to comment.	
Williamson, H.	Please stop the testing that harms sea mammals !!	This comment has been duly noted.
Williamson, H. Wilson, J.	Please stop the testing that harms sea mammals!!  PLease do not expand the Navy's testing/exercise area into Oregon coastal waters. I live on the central Oregon Coast and we are experiencing higher poverty than almost any county in the state because our only real industry here is tourism. Formally we were a fishing, timber and tourism area but now the fishing fleet is almost gone and we can no longer harvest timber like we used to. The cities and county have spent considerable years and money and effort into trying to build up other industries to sustain our families and have come up with eco-tourism.  Our whale watching center, our whale watching charter boat tours, our resident harbor seals along Salishan Spit, Sea Lion Caves, and the expanding territory of our sea elephants are bringing in millions of ecotourism dollars, not to mention the Hatfield Marine Science Center which attracts the dollars of research and observation of the local pinnapeds and whales.  We who live here cannot take another major economic hit: the regular tourism industry has already tanked and our vacation house/second house industry has crumbled because no one is buying second or vaction homes anymore. We have to let go of over 30 teachers in our school district due to lack of monies, we already have no art or music or PE in our schools. In the last two months we have had many businesses go under including a famous steakhouse that has been here over 30 years and an art gallery that has been here almost 40 years. Hardworking families are already working 3-4 part time jobs and our social services are gutted: our county health clinic has been reduced to being open only one day a week. Lincoln County has the highest foreclosure rate of homes in the state and one of the highest in the country. Our local hospital (the only one within 25 miles) has asked its' employees to take all of their vacation time to get that "time" off of their bookswe really can't afford to lose our hospital.  Please do not extend testing into our waters. If we lo	This comment has been duly noted.  It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The locations and levels of Navy training in the Northwest Training Range Complex are expected to continue as they have for decades. The potential economic impacts—including impacts to fishing and whale watching—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting these industries.
	community, I don't want the exercise/testing waters to destroy my community	

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	which is already in critical condition. Please do not destroy our ability to provide for ourselves.  Respectfully Submitted, Joy Wilson	
Wilson, Michael	I would like to request that the Navy take no action on the proposed plans for contaminating our waters and destroying our wonderful way of life that we and the natural environment stuggle to maintain everyday. I realize and appreciate the defense of our country that the Navy provides but I think there are other less invasive ways to do this. Remember you live here too and think that if our natural environment goes we go too. Then our freedom is worthless if we destroy what we are supposed to be fighting for. Please think before you act. Dont you think we already have much more military might than we need? Think of all the children we could feed with that money you save by not wasting it on these expensive and unnessesary programs. Thank You Michael Wilson	As explained in Section 2.3.2.3 of the Draft EIS/OEIS, a reduction in levels of training within the NWTRC would not support the Navy's Purpose and Need and was therefore eliminated from further consideration. The decision on which alternative to pursue (whether the No-Action Alternative or Alternatives 1 or 2) will be considered by Navy representatives following the review of all relevant facts and impact analyses. This comment has been duly noted.
Wilson, Mouna	When we stop practicing how to kill, perhaps we will begin to practice learning to live in peace. Morally, environmentally, economically, it simply does not make sense. This is a different time, a different world. Find some way more creative and beneficial to "train" the navy. Devise a way to clean the plastic out of the ocean. Train the men in qi cong, so that they begin to feel connected with the Universe, instead of focusing on "man conquers all."	This comment has been duly noted.
Winn	Hello, I am hearing that the Navy plans to increase the number of training missions at NAS Whidbey. This is very disturbing. The noise these cause already is beyond unbearable. It is also a great cause for concern that no apparent effort is made to avoid flying in the vicinity of schools, where many children would be killed in the event of an accident.  The number of missions should be reduced, not increased, especially since our nation is facing budget shortages, and also to reduce the pollution these flights cause.  Sincerely, Thomas Winn	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Winston	Accelerated warfare training along with the pollution and waste of government money it entails is destructive to everyone of us living on the west coast and to the government itself. A loud no to this plan.	This comment has been duly noted.
Wolf, B.	We are fools to continue to look upon war as a solution to world problems. We will bring our nation further down the tubes with the high costs of this wasteful military project. We are already almost bankrupt, but programs like this military run-amok will give us the final kick down. Such waste, such flagrant misuse of our knowledge. We know this is saber-rattling for no real purpose. Much ado about nothing. But great cost in lives and money and the destruction of our planet. Think of the CO2 being released by these actions!!!!	This comment has been duly noted.

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Wolf, P.	I respectfully request that there be no expansion of Navy warfare training in the Pacific Ocean. This will cause irreversible contamination of the environment and needles death of many sea mammals.	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
		The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities and underwater detonations for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, limited detonations per year, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training or underwater detonation exercises as proposed in the Draft EIS/OEIS.
Wolman-01	Thank you for meeting with the Board of Supervisors of Mendocino County, and with the public yesterday. We appreciate the good news that depleted uranium munitions will no longer be used for training in the Pacific.  I submitted comments in writing yesterday. This comment is specifically about the gray whale migration along the Pacific Coast. Little is known about how the whales communicate with one another as they make the long trip south in January over 2-4 weeks, and then return with the newborn babies in March for a similar period. Does naval sonar disrupt their communication? Might a baby whale get confused and lost from hearing irrelevant sounds produced by the Navy?	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
	Would the Navy consider suspending all sonar except that essential for defense, but all training operations involving sonar, during the migration periods?  Many thanks,  Carol S. Wolman, MD	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise. Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. The acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness, even though many marine mammals will be detected and sonar exposures will be avoided.
Wolman-02	I'm concerned about the Navy's plan to use the Northwest Coast as a training range for a couple of reasons: 1) This coast is still somewhat wild, and home	Please refer to the following sections of the Draft EIS/OEIS for the environmental impacts on the multiple resources listed below:

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	to many forms of bird, animal and sea life, which may well be disrupted by this plan. I'm especially concerned about the California Gray Whales, whose migration route goes along the coast.	3.9 Marine Mammals 3.10 Birds
Wolman-03	2) With the dwindling of the fishing and logging industries, tourism has become our main source of revenue along the coast. Naval activity would make the area much less attractive to tourists.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.
Wood, J.	Dear Madam/Sir: Here are the comments I would like to make in regards to the Navy's EIS for the Northwest Training Range Complex expansionThe Southern Resident killer whale population is described in your EIS as increasing (as of the last count in 2007). Given the oscillations of the population over the last several decades (and the disappearance of 8 whales in the last year) a better term would be oscillating around a population of ~85Because the study came out after the preparation of this EIS, there is no reference to the paper by Holt et al (2009) Speaking up: Killer whales increase their call amplitude in response to vessel noise. JASA express (125) 1. This study demonstrates a behavioral (acoustic) reaction to increased background noise. This increase in call amplitude is most likely an attempt to overcome the masking of calls by the background anthropogenic noise. This increase in call amplitude also is likely to come at an increased energetic cost. Thus the added noise of further sea and air patrols in the training range as well as the detonation of explosives and active sonar are likely to have an acoustic impact on Southern Resident killer whales when they are in the vicinity by altering their behavior and increasing their energetic costsThe classification of TTS as a level B harassment is somewhat problematic in the sense that TTS is a temporary injury to the hearing ability of the individual. Multiple TTS exposures can lead to PTS. Thus it might be more accurate to list TTS as a level A harassmentIn order to avoid harming the Southern Residents (and other marine mammals) both acoustic and visual surveys are needed. This by definition should preclude active sonar, ordinance explosions, and other noise generating activities at night since the ability of visual observers will be impairedOne suggestion on monitoring acoustically active species on the range complex is funding a hydrophone network that would allow the detection of these species such that exercises could be done in areas whe	The U.S. Navy has conducted mid-frequency and high-frequency active sonar activities for decades in the NWTRC with no documented proof of injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency and high-frequency active sonar operations, and the fact that there is little documented scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, the Navy's analysis demonstrates there is little relative risk to marine mammal populations from sonar training exercises as proposed in the Draft EIS/OEIS.
Wood, L.	Reasonable noise mitigation efforts are greatly appreciated, but should not jeopardize realistic training excercises. There is no substitute for complete and frequent training to assure the effectiveness of the Navy's mission and to enhance the competence and safety of personnel. A truly professional Navy is essential to maintain peace through strength. Thanks for your efforts.	Thanks you for your comment. Please see Chapter 5 of the Draft EIS/OEIS. Page 5-3 discusses airborne noise mitigation measures.
Wood, T.	Oregon Parks and Recreation Department (OPRD) has jurisdiction over and administrative rules that govern the Ocean Shore Recreation Area as	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment

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	specified in Oregon's Beach Laws (ORS 390.605 390.770). OPRD manages the ocean shore to promote public health, safety and welfare, and to protect its values and those of areas adjacent to and adjoining it for natural beauty, ecosystem function and public recreational benefits.	were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
	The draft EIS/OEIS notes that the proposed activities would occur offshore of Oregon, primarily beyond the 12 mile territorial sea. However, given the wide variety of activities proposed (e.g., live fire training against surface and air targets, gunnery and bombing, missile firing, torpedo firing, vessel movements, aircraft operations, active sonar operations, Unmanned Aerial Systems etc.), OPRD has concerns regarding the potential for impacts to the Ocean Shore Recreation Area.	
	The EIS mentions that, "although extremely rare, some solid training material can migrate ashore where the public could encounter them" (3.16-11). There is the possibility, although unlikely, for failure of the built-in redundancies to prevent such occurrences, for example, in a storm event. OPRD is concerned that the draft EIS/OEIS does not mention an emergency response and/or salvage plan. If naval vessels, naval marine debris and/or hazardous materials were to come ashore, they would potentially pose a safety risk to ocean shore visitors and resources. It is important to us that an emergency response and salvage plan is developed in coordination with appropriate state and federal agencies (e.g., OPRD and its partners in the Oregon Emergency Response System) and that the plan is considered with respect to the environmental impact, as well.	
Woodke	I am opposed to the extension of the northwest training range complex into waters off of California and Oregon. The damage done in waters off of Puerto Rico warrents long term studies. Under no circumstances should any depleted uranium or other heavy metal munitions be used in an already fragil	It is important to note that, as described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	ecosystem.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Woolsey-01	I am a citizen and taxpayer. I oppose the Navy 's proposed testing off the coast of CA. This is one of five coasts that support life with the upwelling of nutrients that serve fish, fowl and human life. This project would destroy the aquatic environment.	Comment noted.
Woolsey-02	I have reiterated questions so aptly put by an applicant to the Freedom of Information law. I firmly believe there is no need for this travesty. In Mendocino County we depend on tourism which would be harmed as well as the livelihoods of those who live here.	Socioeconomic impacts in regard to the fishing industry, tourism and recreation, and population and housing have been analyzed in the EIS/OEIS in Section 3.14 - Socioeconomics.

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Woolsey-03	See questions below, please. 1) Will aluminum coated fiberglass be used (CHAFF) and how many pounds will be released each year?	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Woolsey-04	2) What are the health effects of Chaff particulates on humans, wildlife, soil and water? Please provide a study on these human and wildlife health effects.	The use of chaff is described in Chapter 2 of the Final EIS/OEIS. The potential impacts of chaff on the environment are analyzed in Section 3.3.2.2.
Woolsey-05	3) Will weather modification or mitigation programs be initiated during the Navy program? If so, what chemicals will be used in this program?	No weather modification programs exist.
Woolsey-06	4) Will jets be allowed to fly at heights that leave persistent jet contrails that exacerbate global warming and change our climate (NASA Studies)? What impact will these programs have on California climate?	Only reasonable scientific impacts have been discussed in this EIS/OEIS.
Woolsey-07	5) A complete listing of jet fuels to be used (+ additives), and the components of said jet fuel with information on the number of chemicals released and their impact on human health, agriculture, soils, water supplies, and wildlife. (Include JP-8, JP-10, and other new experimental jet fuels. The Jet Emissions report is available online at the EPA Website:	Emissions calculations give the expended exhaust from Navy vessels and aircrafts.
Woolsey-08	6) A complete study of depleted uranium showing human health and animal health effects.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Woolsey-09	7) A complete study of the health effects of the compounds listed in Table 3.3-5 Page 3.3-11 and definitions of RDX and HMX (use and toxicity).	All health effects have been analyzed and discussed within the EIS/OEIS.
Woolsey-10	8) Toxicity of Red and White Phosphorushumans, wildlife, soils, water supplies, marine life.	Potential impacts associated with phosphorus use are described in Section 3.3. White phosphorus is not used in the NWTRC and is not part of the proposed activities.
Woolsey-11	9) A complete listing of the propellants, explosives, pyrotechnics, chemical and riot agents, and smoke canisters (type of smoke and toxicity) is requested. And a complete listing of ground-based and atmospheric obscurants which will be used in these programs and their toxicity.	Please see Page 3.3-10; Hazardous Materials and Wastes for the results of recent studies conducted by the Northwest Fisheries Science Center (NOAA) concerning the current level of military expended material on the ocean floor. NOAA conducted a survey of materials generically referred to as "marine debris" by NOAA off the West Coast of the United States during 2007 and 2008
Woolsey-12	10) How much money will Washington, Oregon, California and Idaho be reimbursed for hazardous waste disposal and other toxic site clean-up from the Navy and the Department of Defense? It is requested that the reimbursement be 100% if this program is initiated.	There are no toxic site clean-up sites as a result of Navy activities, nor is this likely given the activities and mitigation measures associated with the proposed action.
Woolsey-13	11) A complete listing and studies of the synergistic effects of all chemicals used in the Navy program with associated health effects. This includes	All effects from chemicals are discussed in Chapter 3 and cumulative impacts are discussed in Chapter 4 of the EIS/OEIS.

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	cumulative and synergistic effects as well.	
Woolsey-14	12) Studies of the synergistic effects of project chemicals on bioaccumulation in fish and other marine food supplies.	All effects from chemicals are discussed in Chapter 3 and cumulative impacts are discussed in Chapter 4 of the EIS/OEIS.
Woolsey-15	13) Will northern California Maxwell MOAs (Military Operation Areas 1, 2 & 3), be used in this Navy Project? If yes, what will be the actions taken over these area by all branches of the military?	The MOAs are part of the proposed action for overflight training.
Woolsey-16	14) What effects will bomb blasts in the Pacific Ocean be on the San Andres and other California earthquake faults? A rough study of the EIS leads one to believe that the Navy and the Department of Defense intends to leave behind a toxic pea soup of chemicals and other toxins in their wake, along with the human health effects and dead marine life. Many areas of California, Oregon, Washington, and Idaho would be contaminated from these experiments through airborne and water migration across these regions. It also appears that nothing would be spared in testing weapons of war on the public (with the Nevada Test Site and Area 51 available for much of this testing and the Atlantic Ocean also available near Washington, D.C.). It appears that these Western States will be sacrificed for building and testing more weapons of mass destruction. Remember that sacrificing California, Washington, Oregon and Idaho is just the beginning. I am requesting that the State of California be excluded from this Navy project.	Only reasonable scientific theory has been discussed within the EIS/OEIS.
Worley	I believe the US Navy and the environment can exist together. The research and use of these areas are paramount to the defense of the Nation and the Pacific Northwest. While I respect the wildlife and natural environment, I believe the Navy's program must take precedence. The Navy should make every effort to protect the natural environment while using these areas. GO NAVY.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses. As part of this analysis numerous mitigation measures are employed to protect the environment and its inhabitants.
Wrubleski	"The Northwest Training Range Complex plan should not be approved till the public have been fully informed about it e.g., until multiple public hearings have been held about it, in all of the states and counties within range of it, and all the questions at http://www.newswithviews.com/Peterson/rosalind114.htm are answered, to the public. "Please fully publicize answers to all of those questions, organize many more public hearings in all the areas involved, and extend the public comment period beyond those hearings. I've so far met only 2 people who've heard of this plan. If that is the Navy's intention, it's not government by the people for the people."	Six public hearings were held to inform the public about the Navy's Proposed Action and to obtain written and oral comments on the Draft EIS/OEIS for consideration in the final document. All public hearings included an open-house information session beginning at 5:00 p.m. and a public hearing beginning at 7:00 p.m. Public hearings were held on the following dates and locations: Jan. 27, 2009-Oak Harbor, WA; Jan. 28, 2009-Pacific Beach, WA; Jan. 29, 2009-Aberdeen, WA; Jan. 30, 2009-Newport, OR; Feb 2, 2009-Eureka, CA; February 26, 2009-Tillamook, OR.  Public hearing locations were determined based on the location of potential or perceived impacts to the human environment. Because of the large geographic area of the NWTRC, it would be an imprudent use of taxpayer funding to conduct public hearings where there are limited or no potential impacts.
Wuebbels	Dear Naval personnel, I do not support an increase of the Whidbey Naval Base due to the increased pressure on the animal and the human population already here. The traffic is	The ProposedAction does not include an expansion of activity areas within the Puget Sound or around Whidbey Island. Activities will increase in the activity areas, however, a proper NEPA analysis has been done.

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	atrocous, orcas numbers continue to dwindle and both air and noise pollution will be higher if theis expansion comes to fruition. SAY NO TO WHIDBEY EXPANSION!!!! Rosann Wuebbesl	Navy complies with all applicable environmental laws, including NEPA and its requirements. The Navy has broadly defined its objectives and offers appropriate alternatives to achieve them. To implement its Congressional mandates, the Navy needs to support and conduct current and emerging training and RDT&E activities in the NWTRC and upgrade or modernize range complex capabilities to enhance and sustain Navy training and testing. These objectives are required to provide combat capable forces ready to deploy worldwide in accordance with U.S.C. Title 10, Section 5062. The Assistant Secretary of the Navy (Installations & Environment) determines both the level and mix of training to be conducted and the range capabilities enhancements to be made within the NWTRC that best meet the needs of the Navy. The broad objectives set forth in this document are both reasonable and necessary. In regard to studied alternatives the Navy is in full compliance with NEPA.
Yang-01	Living on the south end of Lopez Island I have already noticed a dramatic increase in jet flyovers in the past month or two. They are flying low (easily visible) the noise is incredibly loud and very disruptive.	The proposed action includes increases in the number of certain activities while aircraft are airborne, but does not necessarily correspond to an increase in aircraft flights. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC, which are mostly overwater or, for those over land, at high altitudes.  Of note, the study on the replacement of the EA-6B aircraft predicted a 13% reduction in total flights when the EA-18G has completely replaced the EA-6B.
Yang-02	I also have serious environmental concerns about the effects of proposed increases in all levels of training in this area. Beyond the documented sonar problems we are just beginning to realize that the waters off south Lopez are crucial juvenile salmon habitat for a number of regions up and down the coast. What effect will the additional noise, debris and underwater activity have on already disappearing marine life?	The proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships. Additionally, none of the activities of this proposed action occur near South Lopez Island.
Yang-03	The San Juan Islands/Salish Sea are a rare and precious marine area housing numerous species of life that are elsewhere endangered. I strongly object to increasing Navy activity of any sort in this fragile and important area.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses. Additionally, the proposed action includes potential increases in the number of certain individual training activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or flight hours, or at-sea time for the ships.
Yarbrough	I am writing due to an article in the Brookings OR Pilot from a concerned reader. While I am unaware of the scope of his complaint as I have recently returned to my hometown, I share his concern about military activities off the West coast and the possible environmental impact. I am already aware that sub-sea operations are being profoundly damaging to sea life and the potential destruction of our coast area habitat / sea life is unacceptable. I am	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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	a USAF Veteran. My father was in the NAVY. I understand the need for our forces to be well trained, I would simply appreciate it if it WASN'T in MY back yard: COPY ?!	
Yarrow-01	I am writing to state that I am in favor of the "No Action Alternative" in the Northwest Testing Range Compexies Draft EIS.	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Yarrow-02	Additionally, I would like to state that I am opposed to: 1) the Navy's testing of depleted uranium weapons anywhere (underwater or on land);	1) Following the public release of the Draft EIS/OEIS, the Navy decided to replace all depleted uranium rounds used in the Pacific Ocean for training. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7 to describe that depleted uranium use is no longer included in the Navy's Proposed Action
Yarrow-03	3) the use of underwater tests (sonar or other) that might damage the hearing of whales and other aquatic life or cause other harm to them;	3) The U.S. Navy has conducted sonar and underwater detonation activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar or underwater detonation training exercises in the NWTRC.
Yarrow-04	4) invasive testing of any kind in an underwater sanctuary;	4) The U.S. Navy complies with all regulations regarding training in marine sanctuaries. For information about the Navy's compliance with the National Marine Sanctuaries Act, see page 6-3 of the Draft EIS/OEIS.
Yarrow-05	5) testing of any kind without independent environmental	5) Many of the Navy's action undergo independent review by other regulatory agencies in the process of permit application. In addition, citizens such as yourself provide comments during public commenting periods.
Yarrow-06	Lastly, I would urge the Navy and the US Government to take all actions necessary to protect and restore our fragile marine ecosystems as part of their duty to the citizens of the United States and their moral and treaty obligations to native peoples.  Thank you.	The Navy is very concerned about the environment and is a leading sponsor of marine mammal research. The Navy provides a significant amount of funding and support to marine research. In the past five years the agency funded over \$100 million (\$26 million in FY08 alone) to universities, research institutions, federal laboratories, private companies, and independent researchers around the world to study marine mammals. For additional information on Navy research efforts, refer to page 5-20 of the Draft EIS/OEIS.
Yates	I am against the increased Navy testing off our coast that may further damage our whales and other sea life.	Please refer to Introduction to Chapter 10, page-10-1 for response to general comments.
Yerby	We live just south of the city limits of Anacortes, Washington. We have learned to adjust to the window-rattling planes flying over our house in bad weather and during our "turn" when the planes fly over our house for weeks at a time. A Navy pilot friend told us they use different flight patterns so as not to have the noise consistently in one area.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not imply an increase in activities at NAS Whidbey Island.

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	We recognize the need for training exercises, but are writing to express our concerns that the window-rattling noise will increase over our home. In recent weeks it has been excessive. We can only imagine what it would be like if you were to double the number of runs, as was mentioned in the January 26, 2009 article in the Skagit Valley Herald.  Obviously we live on an island near the water. But we are writing to express our hopes that "offshore" training exercises will truly be conducted "offshore" and that our domestic tranquility will be guarded.  Thank you.  Sincerely, Bob and Linda Yerby	
Younker	We have lived on the northern CA coast for over 34 years and we are very concerned of the negative impact the Navy and Dept. of Defense testing would have on the coastal environment and all the creatures that live in the ocean. We are against this testing in this entire northwest area.	This comment has been duly noted.
Zachary	I support the No Action Alternative. The ocean ecosystem is already overburdened with activities,pollution, and destruction created by humans. We here on the North Coast of California depend on the ocean for our livelihood, food supply and as an attraction to bring tourists to our area. We already have proposals for wave energy and offshore off drilling activities off our coast. Let the oceans live!	This comment is duly noted. The decision on which alternative to pursue will be considered by Navy representatives following the review of all relevant facts and impact analyses.
Zekley	I oppose the testing of weapons, sonar, and training exercises in the Pacific Northwest. They are bad for the environment.	This comment has been duly noted.
Zentura	You are barbarians. What you're doing is out & out murder. Toxic chemicals are not safe to use. You are not fooling the innocent people of this country who are well aware of the government's plan to kill them off. This must not be done.	This comment has been duly noted.
Zick	Please do not use weapons testing in the waters where it hurts the ears of our unreplaceable and valuable friends the whales and dolphins and others who live in the ocean.  Please use your conscience.	The U.S. Navy has conducted mid-frequency active sonar activities without incident for decades in the NWTRC. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises.
Zimmermann	I am the mother of three children, including a newborn. It is NOW time to stop all testing in our Washington State marine area. No more explosions, etc for random testing. PleaseWashington state has a vulnerable coast line, with humans and animals, fish, birds and reptiles all affected by run off waste from these type of tests. Make love not war. thanks!	This comment has been duly noted.
Zylstra	I oppose the expansion of the Navy's Northwest Training Range Complex.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's

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	The potential impacts from the proposed activities on threatened and endangered species as well as the marine ecosystem as a whole is unacceptable.	proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.
	A "No Action Alternative" is the preferred option. The potential long-term impact on the environment are significant, as are the economic impacts on fisheries and tourism. Short term gains in military training and testing do not outweigh the long-term adverse implications to the ecosystem along the Oregon coast.	The potential economic impacts—including impacts to fishing—of the Navy's proposed action are described in Section 3.14 of the Draft EIS. Because the Navy has no exclusive "right of way" when conducting training activities on the ocean, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic, thereby reducing the likelihood of negatively affecting the fishing industry.

## G.3 ORAL COMMENTS

The following comments were taken orally during the public hearings held at Oak Harbor, WA, Pacific Beach, WA, Grays Harbor, WA, Newport, OR, Eureka, CA, and Tillamook, OR.

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Oak Harbor, Washin	gton – January 27, 2009	
	I hardly intended to go first.  My name is Marianne Edain, spelled E-d-a-i-n, and I'm representing Whidbey Environmental Action Network.  My notes are in a jumble, so be it. I spent a good deal of time this evening trying to sorry about that, I'm short trying to get a definition out of various ones of you of what constitutes the littoral zone. I haven't heard a definition.  Since it is the intent of this to move from deep water into the littoral zone, I believe it's rather important to know what that constitutes, and I would appreciate some discussion in your FEIS of what constitutes the littoral zone, specific depths and specific distances from high tide.	As described in Chapters 1 and 2 of the Draft EIS/OEIS, the Navy's proposed action does not include expanding the range complex, but to continue training in the same area as they have since World War II.  The littoral zone is a term used to describe general conditions, not specific depths or distances. "Littoral" refers to a near-shore environment, but that can vary greatly depending on the platform conducting the training, the type of training, and even the phase of training.
Edain-01	I heard from a number of people this evening "Oh, don't worry about that, we're not planning to do that right now."  One of the basic rules of law is that one must construe every word of the document as if it meant something, so when I read that a particular proposal is going is being proposed, whether it is, there is the programmatic and then there is the specific.  When the program authorizes the specific, and the program in this instance is the EIS, or the EIS is for the program, then I have to assume that all of the specifics which are listed in that program are intended at some point, maybe not tomorrow morning, to be carried out. So don't tell me that "We're not planning that right now." I think that that was not a good thing, and people should realize that.	
Edain-02	I have not gone over the thousand plus pages of the EIS, I'll get there, but I have noticed that used expended materials are intended to be simply dumped. They will fall to the benthic zone and theoretically be covered with silt. That's not acceptable. That's absolutely not appropriate.	The complete analysis of the potential effects of expended materials is described in the Draft EIS/OEIS Section 3.3 – Hazardous Materials and Section 3.4 – Water Resources.
Edain-03	Something that came up in the presentation is this portable tracking range. And one hopes it is defined somewhere in the EIS, because I have not a clue what it is you're talking about. So we would appreciate clarification.	The Portable Undersea Tracking Range is described in Section 2.6.2.2 of the Draft EIS/OEIS. The impact it and the other range enhancements would have on annual training levels is described on Table 2-8 on p. 2-32 of the Draft EIS/OEIS.
Edain-04	While we see that, you know, all kinds of wonderful things are going to be done to avoid impacts to marine mammals, we're not seeing how actual impacts intended, unintended or otherwise, are going to be tracked, and what's going to be done to avoid future impacts once it's demonstrated that impacts are, in fact, happening.	A Marine Species Monitoring Plan has been developed and is described in Section 5.2.1.3 (p. 5-21) of the Draft EIS/OEIS.
Edain-05	It's unclear to me, the maps that we're seeing show range 237, but it also shows other ranges, including one in the Selkirk Mountains. So we would like	The inshore airspace is described in the Draft EIS/OEIS in Section 2.1.2. The only activities currently conducted in the area described in the

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	to know what exactly are you planning in the Selkirk Mountains, what are you doing there now and what's changed?	comment are aircraft flight operations that include Air Combat Maneuvers (described in Section 3.3.1.1.7) and Electronic Combat Training (Section 2.4.1.4). No new activities are proposed for those areas.
Edain-06	The EIS admits, and it was admitted just now, that there will in fact be impacts to ESA listed species. While there may not be serious impacts, there's a reason why they're ESA listed, and we ain't happy. No, we don't want impacts to EAS listed species.  Oh boy, I got three more. Somebody here today contacted the Makah Tribe. We were told that the tribes were consulted. They were rather floored. They had not heard anything.	As described on Table 6-1 of the Draft EIS/OEIS, the Navy is in consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service concerning potential impacts to ESA species. The Navy will conduct its activities in accordance with the resulting Biological Opinions produced by these two regulatory agencies. In addition, the Navy will comply fully with the Marine Mammal Protection Act.  The Makah tribe was contacted. Please see Appendix F.
Edain-07	I think consultation needs to be a little more vigorous. While you say you're abiding by all the federal regulations, you're also asking for waivers. That's not appropriate, you're either abiding by them or you're not. Don't ask for waivers and then tell us how you're abiding by them.	The Navy is requesting no waivers for current or future activities in the NWTRC.
Erickson-01	Steve Erickson, also speaking for Whidbey Environmental Action Network.  First, I would point out that the web site where the documents were to be available basically have been dysfunctional, and the actual availability of the EIS, DEIS, has been less than half of the allotted public comment period.  Now, one purpose of NEPA, a primary purpose, is informed decision making, and that includes allowing the public the opportunity to also comment and review the documents. Having the documents available for such a relatively short time for proposal of this scope does not really is not really consistent with that purpose. The comment period really needs to be extended, at least for the amount that was lost when the documents were not available.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Erickson-02	Second, regarding I just want to touch on our concerns regarding the training in Eastern Washington, and the expansion, or the intensification of the activities, I'll say.  Our particular concern regarding Selkirk Mountains is that is the area with the last remaining occurrence of the lower 48 states of Mountain Caribou, federally listed an endangered species, and one of the rarest mammals in North America. Currently there's no critical habitat designated for Mountain Caribou, although there is a lawsuit in progress that ultimately is going to end up with designation critical habitat. Now, when I inquired about this to one of the representatives of the Navy here tonight, I was told that a critical habitat is designated, the Navy would simply ask for an exemption from the Endangered Species Act from that critical habitat.  I point out that the area we're talking about here is probably relatively small in the overall scheme of the area that the Navy is currently using for training. And even without critical habitat being endangered for that rare mammal, you should avoid that area, or raise your elevation, or you should certainly be analyzing the impacts.	The inshore airspace is described in the Draft EIS/OEIS in Section 2.1.2. The only activities currently conducted in the area described in the comment are aircraft flight operations that include Air Combat Maneuvers (described in Section 3.3.1.1.7) and Electronic Combat Training (Section 2.4.1.4). No new activities are proposed for those areas. The Navy will continue to comply with all existing Federal regulations, including the Endangered Species Act, and has no plans to request any waiver as mentioned in the comment.  The potential impacts of air activities in this area are described in the Draft EIS/OEIS in Section 3.11 – Terrestrial Biological Resources.
Erickson-03	And this EIS, although most of the attention here tonight is rightly focused on the marine impacts and the marine zones off the coast of Washington that that area is also included. And there's really no analysis in there at all of	The analysis of impacts to marine mammals and other marine species is in fact very thorough, and is found throughout Chapter 3 of the Draft EIS/OEIS, including Sections 3.3, 3.4, 3.6, 3.7, 3.8, and 3.9.

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	those areas. I mean there's just some kind of boilerplate language. And that is deficient in terms of what the purpose of performing an environmental analysis is.	
	At that I'm going to leave it.	
Zylinsky-01	I'm actually here tonight to kind of represent the voice of the mammals and the birds and the fish that can't speak, so it's my vote and their vote that we go for the No Action alternative, which means maintaining the existing training levels. Obviously, they can't speak, and I do need to speak in their behalf.  Also, I'm very concerned about the depleted uranium mutations that sink to our sea floor. I want it to be noted that uranium, whether depleted or not depleted, has a half life of 250 thousand years. We all know that. And we know that they will sit on the ocean floor for that long. And what effect that has on the environment we don't really know. None of us are going to live that long. How many generations will that affect?	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Zylinsky-02	The other thing I would like to mention is that basically we just really want to know if the oversight if the committee that's going to watch over this is actually a part of your your reporting, your fish and wildlife meeting, are they actually going to be with you side-by-side observing this, or are you just reporting to them on the observations and the scientific data that you're collecting? So that's a question I have as well.  Thank you.	A monitoring plan is being developed in cooperation with the National Marine Fisheries Service. The details of the monitoring plan, to include reporting requirements, are provided in this Final EIS/OEIS.
Bayes-01	Good evening. Thank you, and thank you to everyone here who care about the earth.  I just want to play this drum as a reminder of your own heart beating, and that the decisions that are being made are really for the next seven generations for us to remember, you know, the Earth Mother and all her relations. And to that deep, deep heart wisdom that we know in our bodies and we know in our spirits, that we need to take care of our earth, and we need to take care of the animals, and we need to care for the next seven generations of people and care for all the children and the generations yet to come.  This is a deeply spiritual decision that we're making, and I would like to be a voice for that. And just to share a song. I hear the voice of my grandmother calling me. I hear the voice of my grandfather call. They say "Wake up, wake up people, wake up, wake up, listen listen, listen listen." They say "Teach and share wisdom, elder, teach and share wisdom, listen listen, listen listen." May the rivers all run wild. May the mountains go unspoiled. May the air be clean. May the trees grow tall. May there be love for every mother and child. May there be love for every being in the wild. Listen listen, listen listen, listen listen."	This comment has been duly noted.
Morris-01	My name is Linda Morris, M-o-r-r-i-s. In terms of the use of the depleted uranium and tungsten heavy metal, any other heavy metals and/or sonar devises, I and the public don't know what the current level of those, the	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of

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	usage of those substances and devises are. And there's a request for further use of or increased use of these sources, these substances. And I don't think that we have enough documentation as to the effects that they have on life in terms of serious medical problems, or what they do to marine mammals.	training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	So I believe that we should not increase the usage of any of these until we know more research, until we have more information about what the effect is on marine mammals and human life. That's one comment.	Analysis of other materials was described in the Draft EIS/OEIS in Section 3.3.
Morris-02	And the other comment is, this is a separate issue, is there is the issue of proposed increased use of training programs in marine sanctuaries. And I believe that the important word here is sanctuaries, and I don't believe a sanctuary is a place for any kind of use of weapons and violence. And you know, the sanctuary of thinking of it in terms of a church is a place where people can go to be safe. And I believe it's the same thing in a marine sanctuary, the marine mammals and marine life needs to be safe, and this is in contradiction to what the Navy wants to do.  Thank you.	As described in the Draft EIS/OEIS, the Navy will continue to comply with all statutory requirements, such as the National Marine Sanctuaries Act (described on p. 6-3). At present, the only Marine Sanctuary within the NWTRC is the Olympic Coast National Marine Sanctuary.  The Draft EIS/OEIS describes in Section 3.6.1.4 the activities permitted within the Sanctuary as listed in 15 CFR 922.152(d)(2).  Further details describing the Navy's complete compliance with the National Marine Sanctuaries Act is provided on Table 6-1 on page 6-3 of the Draft EIS/OEIS.
Morris-03	Hello, I'm Linda Morris. Thank you for welcoming public comments.  And I wish that I had the confidence that the Navy will really, really truly take what it said in these public comments, and take them under advisement, and that it might change the plan. So that is my hope.  I have a few comments and a couple of questions. The EIS says that the Navy is planning to phase out depleted uranium. And I would like more information on that, when, a specific date.  The problem is that we don't know how much is currently being used, and we don't know so part of trying to assess the damage to marine life is that we don't know how much is currently being used, we don't have good research, long-term research, and we don't know what the effect of other heavy metals like tungsten will have long term on marine life.  Commander Miller, you talked about environmental stewardship. It's a good word. But I believe that this phrase is in direct conflict with the use of sonar, DU, tungsten and other heavy metals.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Morris-04	I've done a lot of research, particularly on DU, but also on sonar, and we don't know their long-term effect on marine mammals and on the human race. And I think that we're playing a very dangerous game. So I'm not convinced that there will not be significant harm done by the use of these materials and sonar.	A complete analysis of the potential impacts of sonar and other stressors to marine mammals was provided in the Draft EIS/OEIS in Section 3.9. This section described short- and long-term effects.
Morris-05	I asked a question several years ago, a couple of years ago, and the Navy had an open house over on the peninsula, and several of us from here went to that open house.  And I asked a question of one of the men, of the Navy men who was showing what they were planning to do, and I had said to him "How much is enough?" When will it be enough?" And I asked the same question of another gentleman here tonight.	The proposed action does not include any new training areas, either on land, in the air, or on the ocean. The analysis does include the potential increase of certain training activities.

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	Every time the Navy comes to the public they ask for more land, more training opportunities. All of this has an impact and an increasing impact on ourthe health of our oceans and our beaches.	
	And so I ask how much will be enough? And will the Navy come asking for more and more and more in the future? And what will be left of healthy beaches and oceans for our children and our children's children?	
Morris-06	I would like to, in conclusion, make a plea for citizen oversight of what goes on in this area that is being talked about tonight. It's a huge area, including a marine sanctuary. Which to me the word "sanctuary" means a place of safety, someplace where you can go and feel that you will not be disturbed. So that the Navy's activities in this marine sanctuary is in direct contrast to what I consider to be the meaning of the word "sanctuary."	As described in the Draft EIS/OEIS, the Navy will continue to comply with all statutory requirements, such as the National Marine Sanctuaries Act (described on p. 6-3). At present, the only Marine Sanctuary within the NWTRC is the Olympic Coast National Marine Sanctuary.  The Draft EIS/OEIS describes in Section 3.6.1.4 the activities permitted within the Sanctuary as listed in 15 CFR 922.152(d)(2).
Morris-07	But back to the citizen involvement, I would really believe that you would have a lot less antagonism by the population around the Pacific Northwest if the citizens felt like they would have had a voice in the oversight of what goes on.	Oversight of Navy activities in the NWTRC involves U.S. regulatory agencies such as the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. Citizen oversight ultimately resides with the civilian leadership of the military—the Commander-in-Chief.
	Right now we feel that at least I do, and I know lots of people feel like we don't have the information. The wool is being pulled over our eyes, and we don't have a lot of confidence in what's going on. Thank you.	
	I'll try to make my comments very brief.  But it isn't always the case that the bad guys sit on one side of the table and the good guys sit on the other side. We're all in this together.	As described in the Draft EIS/OEIS in Section 2.2.2, without mid- frequency active sonar, the U.S. Navy would be severely limited in its ability to counter the threat posed by modern, quiet submarines.
	And I can understand the need for training and being prepared, but I think that we're missing the boat in some of our developments. And the sonar buoy at one time was a passive system. And then they added explosives to it. It's kind of like driving a carpet tack with a sledge hammer.	Although there are advantages to passive sonar as described in the comment, each tactical situation has numerous variables that the onscene commander evaluates in determining the best strategy in how to use the available assets. When a given situation requires active sonar, it
Gillon-01	I think that we really need to put an emphasis on seeing if we can get back to the passive system with the sonar buoy. I can understand the concern over the Chinese diesel boats, but if we can get back to a passive system we can - we're better off, because once you light up these high powered systems on submarines and frigates you also alert the enemy that you're there. And the same thing in setting off the explosives.	is imperative that the Navy crews are proficient. That requires training ahead of time, such as the training afforded to ships and aircraft in the NWTRC.
	And most of the diesel boats have to transit with diesel, not with electric power, so their signature should be more pronounced when they're under diesel power than electric power. And that really should be taken into consideration.	
	We had an incident in the '60s where the KGB seized a Russian nuclear diesel not nuclear, a Russian diesel submarine that had atomic missiles onboard, and they accidentally blew themselves up. If we had had a good acoustic system we could have probably picked them up when they were 200 miles off Honolulu.	
	So I'm just saying that I really feel that we all need to take a look at passive, because it creates less damage to animals, and it may be more if we could hear the enemy coming and get on top of him without telling him we're there	

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	then we'd be better off.	
	That's what I have to say. Thank you.	
Beighton-01	Commander, thank you for holding this hearing. I know these are really tough evenings sometimes for you on the other side of the desk, and I just appreciate so much the Navy having us here and listening to us.  And I would just like to compliment you. I think you try very hard to be good neighbors. And those in the community who are with the Navy who I have met are just the highest caliber people, and so I thank you, you are an important part of our community.  My name is Gaylynn Beighton, and my address is 2507 West Beach Road, Oak Harbor. And I'm sorry I didn't speak my name first.  My vote would be for a No Action alternative. And that is because I have concerns about the reference in the federal notice register to the incidental take of endangered species. My fear relates, among other animals, to the south resident orca. There are less than 100 of these animals left in the world. We have names for all of them here. We are we love our orcas. We have an organization called the Orca Network, and they have a map and they tell us every time they see one of these orcas, whether they're in Puget Sound or whether they're down in San Francisco and off the coast of California.  They are really on a slippery slope. They're facing challenges on many issues with regards to lack of food, pollution in the water. And they're just a very, very grand animal, that if there's any way that we can save them from extinction we want to do that.  So I'm very concerned about the reference to incidental take, because in my mind losing one of those animals is too many.	The DEIS presents potential impacts from military sonar to the marine mammals expected to be present in the NWTRC. However, all sonar activities are performed offshore of the Washington, Oregon, and California coasts in the PACNW OPAREA. As such, the impacts to the Southern resident Killer Whale population from military sonar are minimal, occurring only while the population is outside of Puget Sound in the Offshore Area of the NWTRC.  The analysis within the Draft EIS/OEIS concluded (Table 3.9-12) that the Preferred Alternative would lead to potential exposures of low-level sonar (below the level of injury) of at most 13 killer whales per year of all populations. This includes transients as well as resident killer whales. Regarding all populations of killer whales, there are no expected exposures to higher levels of sonar, and no expected exposures at any level due to explosives.
Beighton-02	And then my second concern is the reference that I read of materials that would be left in the environment and not retrieved afterwards. And my thought on that is, you know, the potential for large marine mammals to get caught up in ropes, or you know, strangled to death and that sort of thing. And maybe that isn't even a concern, but that was what came to my mind, was the potential for the marine mammals to get caught up in anything that's left over after the training exercises.  I think that's it. I just hope I hope we can come to something that's the best for the most people. Thank you for listening.	In the Draft EIS/OEIS, an analysis of expended materials (materials left in the environment and not retrieved) and potential impacts to marine mammals begins on p. 3.9-102. The risk of entanglement, among other potential impacts, is found in the following pages. Also, due to their susceptibility to entanglement, a more thorough discussion is found in Section 3.8 – Sea Turtles, beginning on p. 3.8-15.  For both marine mammals and sea turtles, the analysis concludes a very low potential for entanglement.
Beighton-03	Thank you so much. I am Gaylynn Beighton, Oak Harbor, Washington.  I was really befuddled and lost my train of thought last time. But I would just like to pose a question to all of us. All of us in this room, all of us together, we're all in this together. What's the point to have state of the art training and weaponry and have a depleted, polluted world left to protect? I think we need to think about this.  I do think tonight maybe the Navy has gotten a bad wrap. I think as people we also have contributed to pollution and depletion of our planet. And I'm	This comment has been duly noted.

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	going to propose that we come together as citizens of the world for harmony, wholeness, abundance, and joy.	
	Thank you.	
	My name is John Hurd, and I live in Clinton.	The Navy determined how many EIS copies to distribute and to which
	And first I want to thank you for your service to our country. And I want to thank you for the opportunity to address the issues about the EIS, and for making the documentation available.	public repositories based on locations with most potential impacts from the Navy's proposed actions and population centers in those areas. The Navy was required to make these decisions within the constraints of a
Hurd-01	The 1,068 page EIS was made available at the library in this town. I live 45 minutes south of here. When the web site was down for the days that it was down I was advised "Well, you can drive up to Oak Harbor." And I asked myself, well, if I look at the map finally somebody sent me a copy of the mapI'm thinking well, wait, Freeland is really close to the part of the area that's involved. Why isn't there an EIS at the Freeland library?	limited publication and distribution budget. Also, copies were delivered to a number of organizations, agencies, and elected officials as described in Appendix F.
	This is a print of the page "Cannot be displayed" with my computer clock and date superimposed on the 21st of January at 9:37 a.m., web site still down. It was down for 15 percent of the 38-day comment period.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Hurd-02	And we're assuming that because there was an abort issue and people making comments right up to that period when it went down and then finally got put back up and they figured out how to fix it, that that abort issue existed from the get-go. And so what this constitutes is 51 percent of the public comment period, no comment was available or possible to be done.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	Consequently, I think it's appropriate that there be an extension of 51 percent at least of that 38 day period. So I would like to respectfully request that.	
	And the while recognizing the need for readiness through training, the No Action alternative is all that we can support due to the lack of information available to assess the impact on numerous endangered and declining marine species, especially proposed with new proposed testings of new systems.	
Hurd-03	The Navy is so big that before any expansion of programs could be considered the community would expect from its large neighbor, the Navy, a comprehensive, holistic, problematic impact statement of where we stand at the present time.  We have no information about the existing conditions before we can consider expanding conditions. So prior to supporting proposed changes, the Navy	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
	needs to fund independent research on seasonal presence of marine animals, fish, birds found in training ranges, rather than rely upon outdated surveys.	
	The Navy needs to supply public access to non-classified, ambient, acoustic information in their training ranges, to confirm compliance with operations,	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Hurd-04	and to demonstrate the means to respond to maritime incidents in all areas, including interactions between ships and commercial vessels. We would rather not have oil spills in a sanctuary.	The analysis presented in the EIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not

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		addressed or analyzed.
Hurd-05	And I would like to be told how much depleted uranium exists on the ocean floor, and how much the Navy intends to dump there, as they quote, phase out the use of that material. And I would like to see a scientific study on the impact of that material long term on all marine species.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.uranium use is no longer included in the Navy's Proposed Action.
Hurd-06	Thank you. I always like to go back for seconds at the potluck.  I'll try to be brief. I just want to underscore a couple of things I said, and mention a couple other things.  John Hurd.  I really want to say that in the process that's envisioned here, I think it's important that we don't shoot ourselves in the foot while we're attempting to defend, we shoot ourselves in the foot by destroying part of that which we're attempting to defend. You know, there are no orcas on the surface of the moon.  As somebody pointed out recently, the earth is a living organism, and it's possible to literally wipe out part of that life force and make it resemble the surface of the moon in trying to defend the life that's on this not moon-like surface.  Somebody just recently said something about orcas being caught up in the remnant of activity, and I instantly thought how about the remnant of radioactive isotopes in the food chain for a long time, ending up in what, humans, Eskimos, orcas. Radioactive isotopes are thalidomide forever.  We're talking, like somebody else said, the seventh generation. So that's why it's so important. I thought it was so important to establish what the baseline of what the existing level of depleted uranium on the ocean floor, how many tons or pounds have been lobbed out to date, what the research effects on the biological systems to date are in order to consider future an increased usage.  And I would like to point out that, since I'm the first of second helpings, it is unanimous in this body of citizenry, if I'm not mistaken from what I've heard, I've listened to every speaker tonight, the No Action alternative is what is being advocated for. I've heard no person stand up and say.—I've heard no person stand up and say. "You know, you guys are on the right track in what you want to do with your proposed level 1 or 2, is a good idea."  I wish I had my little graphic, it's a pen and you can pull out this Venetian blind, and it shows the level of expenditure for military on all the other nations of th	As described in the previous comment, Depleted Uranium (DU) use is no longer proposed in this EIS/OEIS.

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	And I think we've reached the point of diminished returns, or is not necessarily in the interest of our national defense, and not in the interest of that which we're attempting to defend. Thank you.	
Morris-01	Hello, I'm Kimmer Morris. Thank you for having this hearing.  I'm a school teacher in Langley, and we just created adopted a new mascot, which is the orca. I am here for all marine species, to speak for them, and I echo everything that has been brought up before.  But I'm kind of wondering how many of you haveor how many of you have ever been snorkeling or scuba diving? I'm assuming some of you have.  Okay. So you know when you're looking out above the water, you don't see very much sea life, but then when you're in the water it is alive, right? You've seen that?  So I have the concern that if you're just looking like this to see what's out there, how are you looking underneath? Maybe that's in the EIS, maybe it's not. I would like it to be.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
	And my next concern has to do with the depleted uranium and tungsten and the research or what ways are being planned to protect the levels, the cumulative levels of that, both presently and in the long term.  And along those lines, I would like to pose a question. How much depleted uranium do you want to eat in your fish and in your children's fish and your grandchildren's fish? How much? Do you have an amount that is acceptable	
	to you?  Thank you. I'm Sarah Schmidt from Coupeville, and I'm speaking as the	Depleted uranium (DU) use is no longer part of the proposed action for
	president of Whidbey Audubon Society.  And I recognize that I'm here and we operate on behalf of protecting wildlife and wildlife habitat, and you're here and you operate on behalf of the conviction currently that we need military to defend our country. So we're here looking at different priorities.	this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the
Schmidt-01	We would vote for the No Action alternative. And I want to recognize that, and applaud the Navy's progress as an environmental steward, which I have certainly seen over the course of my lifetime. But I would pause that it's partly a response to pressure from people like us that keep pushing to make try and make our leaders increasingly aware of protecting the environment.	earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.  The analysis of other potentially hazardous materials was presented in Section 3.3 of the Draft EIS/OEIS. To prevent harm and train effectively, mitigation measures are implemented with the help of NMFS independent review. The Navy's protective measures are effective at mitigating, not
	We have concerns about some other things that have been said tonight about chemicals that will be released into the water and materials left in the environment, the depleted uranium, heavy metals.	eliminating, risk to all natural resources.
	And another concern, as far as the protecting the marine mammals, is that it's difficult to believe that 24-hour lookouts could reliably detect and protect ESA listed species in the real life conditions at sea and visibility.	
	I have some concerns that this EIS was developed in consultation and review with National Marine Fisheries Service at a time under administration in Washington for the last eight years that has been no friend to the environment or to sound science, and has put a lot of pressure on agencies to back off from their quality of work in that regard.	

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	And we've just elected a new administration in Washington that we hope will provide that missing leadership and work towards moving us towards being better environmental stewards and also protecting our crew with more diplomacy so that you won't have as much work to do.	
	The EIS acknowledges that the proposed intensified activities that were modeled may affect ESA listed fish, turtles, birds and marine mammals, and that the Navy would attempt to minimize those effects at a time when the populations of marine mammals, seabirds and ESA listed salmon are dwindling, and there are harbor increased toxins.	
	We've got the Puget Sound Partnership trying to help reverse the situation and bring Puget Sound back to help.	
	There's no place for experimentation or continued harm. And the best way to minimize harm is to omit the actions altogether. Thank you.	
	Thank you. I'm Al Williams. I live in Oak Harbor.	The Draft EIS/OEIS references over 1,000 independent scientific studies
	And we've had a lot of really good comments tonight from heartfelt comments from people, and we hope that you really take some serious note of them.	and research papers. The authors of the EIS/OEIS drew heavily from these peer-reviewed studies to ensure the best available science was considered in the analysis.
	One of the best ones was from you, Commander Miller, when you said you intend to be here for good.	
Williams-01	I would also like to notice that you talked about having a lot of studies using the best science. And I would like to question that, because I've noticed that all of the displays here and all of the comments and stuff have been studies by the Navy. Have you also considered the input from University of Washington Beach watchers, other sources from the educational community, and things of that nature, which I think deserve to be given some high high credit in all of this, as are the comments from so many people here?	
Williams-02	I would like to mention about the severity of the situation of our ecology. And I've talked to some of you people tonight about this. And that is exemplified by the situation with our salmon right now. We've talked about the Orcas, we've talked about other things, and I can't sing as well as you do, but I would like to say that the salmon are just about gone. They're so bad that our federal government now is compensating the Indians for our lack of salmon. California and Oregon this last year completely banned according to the newspaper articles I've read, completely banned salmon fishing this year because there's so few.	Section 3.7 of the Draft EIS/OEIS analyzed potential impacts to fish (including salmon). While the Navy is aware of the status of salmon in the Pacific Northwest, the analysis is clear that the Navy's proposed activities would not result in negative impacts to fish populations.
Williams-02	We have some real concerns about our environment and where it's going. I'm 72 years old now, but that's a short time in the course of history. But I can tell you that when I was a kid we didn't even think that these concerns were important. We thought that the world was just forever. But it's not, and we're finding that out rather quickly.	
	Another question is about some credibility. This has been a little bit mentioned. I'm not going to question the credibility of the people here before us, the people who have done these studies, and the sincerity and the intention and the integrity of you people.	

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	But I have some real concerns, and I think a lot of us do, about the credibility of the people who make many of the decisions farther up, and particularly in the last eight years.	
	And if I may give an example of why I think that this credibility issue is of concern; many of us feel that we have been fibbed to, that we have been deceived.	
	Now, my wife and I are truckers. We just recently retired, but we did a lot of military work, and I was proud to do it. I've hauled for Whidbey here, I've hauled out of Keystone or Keyport, and I've been over at Bangor, I've been all over the country and whatever, and I'm proud of that.	
	We have a question about how much military we need. The question is, is there ever enough to be completely safe? And I think the answer is no. Okay.	
	I think we need to also look at alternatives. Now, this is not your purview, but I think some very important purviews are negotiation and a five letter word, "Peace."	
	My name is Wendy Campbell DeWinter. I have a request. My request is that the Navy, when they're going to put on a presentation, that they actually notify us. In other words, the two papers on the island that I have been told	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.
	they used for notification are not read. The circulation for those two papers is three thousand something respective for each end of the island. Sound Publishing owns both the papers. And the circulation is in the neighborhood of three thousand something for each of those papers.	The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.
Dewinter-01	Now, the city of Oak Harbor has over seventy thousand people by itself, and I'm not in the population of the city of Oak Harbor, I'm north of Oak Harbor, so the island population is a lot larger than seventy thousand.	
Dewinter-01	So I'm requesting that I understand that they did some radio probably PSAs, and the radio station that we have that's local is just in the process of losing its license, it lost its owner died last year, and the kids who have taken it over are trying to run it into the ground, so nobody is listening to that either. But there is the Marketplace newspaper out of the south end of the island, and it is an amazing paper, it goes to every mailbox on the island, and it would be a great release for the Navy to put in a display ad that could be seen by everyone. Maybe they could put in a classified, you know, something.	
	So that's my request. That's my comment. Thank you very much.	
Deviates 00	My name is Wendy Campbell DeWinter, and I reside on Whidbey island.  And I would like to thank all of you for being here, and all of the support staff for doing what you've done this evening and making this a really comprehensive and quite visual presentation. We really appreciate it.	There is no known research or evidence linking sonar exposure and cancer.
Dewinter -02	I'm here as a voice for my friend, Ben White. Ben White is a Ben White, a political professional political I mean excuse me, a professional wildlife environmental activist, spent a significant amount of time over a very short period of time in the waters off of Hawaii when the Navy was testing the sonar. Ben died three years ago from stomach cancer. And I have a profound	

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	feeling that his time that he spent in the waters with the sonar had an effect and contributed to his death.	
	When I lived on San Juan Island the orcas were in my front yard. Prior to that particular property, I had had deer and rabbits and other wildlife in my front yard. It was not until I had the orcas in my front yard that I realized the incredible connection that the orcas have with the humans. Having and I've never gotten to swim with the dolphins yet.	
	But having the orcas as part of my daily activities was one of the most profound experiences I've ever had. And I had no idea prior to being able to be that close to them how sensitive they are, and how much they really care and consider us human beings.	
Dewinter -03	And on religious and spiritual grounds I request that no action, no further extension of testing. I live on the beach on Whidbey Island, and I have the P-8 and the fighter jets flying overhead. They're supposed to be flying over the water. They do that sometimes, and sometimes they're over my house, which is not too many feet, off course, but it's off course enough that they have no business flying over my house.	The proposed action of this EIS/OEIS does not include NAS Whidbey Island takeoffs and landings. Instead, it analyzes training that would occur in the training areas of the NWTRC. While training in these areas would increase under Alternatives 1 and 2, this increase does not correspond to an increase in activities at NAS Whidbey Island.
Dewinter -03	And what my vet and I can tell you about the impact on the health and the dying and the death of my domestic animals is significant.  I just wonder when the Navy is going to start considering the effect that it has, and some of the other things that they do in our sanctuary have on both the wildlife and us human beings.	
Dewinter -04	I request that the media notify us in advance, much further in advance than they have, and that we have access to the EISs. And if there's going to be the Internet down in the future they need to automatically do an extension. And I request an extension of this EIS review since the media and the Internet did not function properly. Thank you.	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
	Well, evidently in life there are no mistakes. Excuse me, my name is Wendy Campbell DeWinter, and I reside on Whidbey Island.	LFAS is not part of the proposed action for this EIS/OEIS.
Dewinter -05	As I left the podium I was handed a piece of paper with an e-mail on it, and it refers to the 1998 Navy action off of the big island of Hawaii when the LFAS, low frequency active sonar, was being tested in regards to the humpback whale sanctuary. And it refers to Ben White. And it says that "The LFAS is known to cause brain damage to humans and marine animals alike."	
	I've I've heard briefings on testing in regards to the whales. And to me the effects are stunning.	
	I would like to talk about the notification, which I mentioned in my last visit up here to the podium, and my request is that the Navy take out a display ad in the Marketplace newspaper from the south end of this island. The Marketplace goes to all the mail boxes on the entire island, with the exception of the businesses in town, unless those businesses are advertising in the	

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	Marketplace, which many of them do.	
	And for less than two 248 dollars you can get a decent sized quarter page ad. And by the way, my disclaimer is I do not work for the Marketplace, nor have I ever worked for the Marketplace. But having been an advertising person, oftentimes in the print media, I appreciate the impact that the Marketplace has had on our community as far as notifying us of events that are happening.	
	And I request that we be notified within a minimum of three weeks before any kind of meeting or presentation for which we would have some of which we would have some interest.	
	And thank you again for being here.	
	Thank you. My name is Howard Garrett, I live in Greenbank.	Both the level of activities and the bathymetry in which they are conducted in the NWTRC differ greatly from other areas of the world where the U.S.
	And I'm president of Orca Network, with about 4,500 subscribers to our list.  And well, first, I do want to say I appreciate your service. And I have high regard for the Navy personnel. I've cooperated with them, they've been very helpful with a lot of our activities. And I want to basically read my comments,	Navy conducts training. There is no basis to make comparisons to events in these other areas.  Instead, the complete analysis in Section 3.9 considered the proposed
Garrett-01	but I want to give a few ad-libs first.	levels of activities within the NWTRC. This analysis supports the
Sunsit 61	And one is the statement that no mortalities to marine mammals is anticipated I find to not be credible. Given the enormity of these exercises, the number of vessels, the munitions used, the sonars, the explosives, I can imagine the difficulty in detecting marine mammals in the water. I can't imagine that there won't be mortalities as there have been on many, many instances around the world.	conclusion that no marine mammal mortalities would result from the proposed activities.
	So I'll just read what I have. "An extension of the comment period is needed on grounds that the web site to submit comments was non-functional during more than half the comment period."	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Garrett-02	As has been mentioned that the principal mechanism for input was down for more than half of the period, so it should be extended, we believe.  And due to the decline of numerous marine species and the lack of information available to assess the impact of the Navy's proposed expansion on these species, especially with proposed testing of new systems and inadequate marine mammal monitoring, a No Action alternative is the preferred option.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Garrett-03	Prior to supporting any expansion of training activities the Navy needs to fund independent research on the seasonal presence of marine birds, fish and mammals within the training areas, rather than rely on outdated surveys. And I want to underline what's been mentioned, that the southern resident orca population is very fragile and tenuous, has been in decline in recent years, listed as endangered since 2005, and passes through that area all year long.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. The density estimate study cited above was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Garrett-04	The Navy needs to provide public access to non-classified ambient acoustic information in their training ranges to confirm compliance with their operations. We need to know what's going on scientifically.	The Navy has no fixed tracking range in the NWTRC from which to record any such acoustic information.
Garrett-05	And the Navy needs to demonstrate a means to respond to environmental	The analysis presented in the EIS is limited to the activities and

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	consequences like oil spills of a maritime incident in their operating areas.	reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonable, nor anticipated outcomes of the proposed activities in this EIS, the impact of such occurrences are not addressed or analyzed.
Garrett-06	We've been involved in observing and researching many species of cetaceans since 1981. We are well acquainted with the difficulty of recognizing brief sightings or faint acoustic signals. In our judgment, given the enormity and the complexity of the number of ships, the basic situation of training exercises, we find the mitigation measures in this EIS are not sufficient to reliably detect the presence of cetaceans in most instances.  The recognition is highly problematic, even for experienced personnel. So the Navy should improve the mitigation measures to include training of monitoring personnel by experienced whale biologists to improve recognition. And finally, on the threat issue that is the basic justification and the mission to deter threats, the long-term challenge is to dial down the need for these training exercises altogether, which is a problem of international relations and diplomacy.  Thank you so much.	The Navy's protective measures are effective at mitigating, not eliminating, risk to marine mammals. Based on the analysis included in this EIS/OEIS, including the Navy's history of operating sonar in the Pacific Northwest with no recorded evidence of harm to marine mammals, the Navy feels its protective measures are adequate.  Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.  Chapter 5.0 of the Draft EIS/OEIS, Mitigation Measures, presents the U.S. Navy's protective measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. While the Navy is very confident in its well-trained lookouts, it does not expect that 100% of the animals present in the vicinity of training events will be detected. In fact, the acoustic impact modeling estimates provided in the EIS/OEIS are not reduced as a result of mitigation effectiveness.
Wold-01	My name is Bob Wold, and I was actually here before the Navy, or close to it. And I've been around all of your areas that you're proposing to effect, and I'm not too sure, what type of uranium are you proposing to waste out there or dump out there at this training system?  The problem that I see out here is we're talking about the food chain. They like to talk about the whales. And they are beautiful, and I've seen them all my life. But the whales are declining because the food supply is declining. And you have sharks and other animals that are sensitive to noise, and our props take a toll on them, so do our sonars that we use on our power boats. And what I do is deliver boats up and down the coast. And it's been a real effect. And I can't see this endangered sound being affected anymore. And I can't see the other areas being affected anymore.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Wold-02	What I would like to see is you go down and use some of the places that you've already pretty much destroyed with your weapons down in the south. I don't know why you can't go down to where you dropped off the last few bombs over there and use that area as a testing area, instead of coming up here and using the sound? I know it's a long distance to travel, but it will give you an area. We've got Hanford and a couple of other areas that we have designated as areas to dispose of things. We should use those areas, instead of trying to reinvent some new areas. We've got fertilizers and nitrates and things like this in our waters now that are causing a lot of problems, red tides and some other things. These areas are affecting us, and they're hitting the people like the plankton and the shark and the killer whales on a microscopic level. And now you're asking to put more stuff into it. I can't	The Navy considered alternative training locations in Section 2.3.2.1 of the Draft EIS/OEIS. The justification for conducting the proposed activities within the NWTRC is described in that discussion.

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	even flush my toilet out at sea. I have to go 200 miles offshore to do any disposal of any waste, and you're asking to come inshore and do some more damage that you won't let the American public do.	
	The people and we just went through a banking problem, a Wall Street problem, because our government allowed these people to go ahead with stuff. And now you're asking to go ahead with the Navy proposal to expand its weapons testing in our waters. We have the spot off West Beach. It's never been the same since I was a kid. I don't fish around here anymore because there's very few fish. I don't even own a fishing pole up here anymore. Thanks.	
Piazzon-01	My name is Toni Piazzon, 1031 Northeast Summit Loop in Coupeville.  I have done some fish seining for NOAA and the Beach watchers. That's my primary concern, is the species that we're losing, such as the salmon, is the critical thing here, and the orcas that depend on the salmon.  And so I don't see how we can even consider doing more damage when the rest of the country is fighting to do all the salmon recovery and gain back what we've already messed up. So do more do no more harm.	Section 3.7 of the Draft EIS/OEIS analyzed potential impacts to fish (including salmon). While the Navy is aware of the status of salmon in the Pacific Northwest, the analysis is clear that the Navy's proposed activities would not result in negative impacts to fish populations.
	I think as other people have said, extending the comment period, dysfunctional web site, I'm sure a lot of people just got frustrated and didn't bother. So that should be extended. And support for No Action alternative,	The Navy regrets the lack of website functionality from January 16 to January 21. The Navy has since taken steps to ensure more reliable connectivity for this website.
Piazzon-02	just like I was saying, let's not do anymore harm.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Piazzon-03	My concern with the pollution in the food chain from the microscopic to the end user, the whales and us, to be putting more metals we've had an ocean pollution problem for a long time. And I think this whole proposal is going against what we finally are starting to come to grips with is how much we're polluting our planet and changing the climate. And we've got to think of different ways of doing things.	Potential impacts to the marine environment from expended materials are analyzed in Sections 3.3, 3.4, 3.6, 3.7, 3.8, and 3.9 of the Draft EIS/OEIS.
	I mean I want to protect I respect all military and thank them very much for what they do, but we have to weigh that with you know, we can't mess up our environment or we're all going to suffer.	
Piazzon-04	And the other thing was I've been out to boats and sea sailing, stuff like that, and it's very hard to be a lookout, and really you can hardly see things, even like turtles. I've snorkels and done stuff like that, and you know, you can't see those little noses coming up. I mean is it breaking water or what? And the amount of sea life is there, it's just too critical.	Navy lookouts undergo extensive training to include on-the job instruction under supervision of an experienced lookout followed by completion of Personnel Qualification Standard Program. NMFS-approved Marine Species Awareness training is required before every sonar exercise.
	So like Howard was saying, we need expert marine biologists that specialize in identifying the sound for whales and other marine mammals.	
Piazzon-05	And I have concerns of the thousand meters, that I don't know if that's really a large enough zone to stay out of when it comes to the sonar and the	The 1,000-yard safety zone was developed to reduce the likelihood of injuring marine mammals from active sonar use. The distance of 1,000

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	explosives because of how much sound carries through water.	yards allows ship crews adequate time to take other measures such as turning away or powering down the sonar. This and all other mitigation measures have been developed in cooperation with the National Marine Fisheries Service.
Piazzon-06	And my concern also is in the behavior, of how much we're affecting their behavior, would it be to strandings or altering their habitats, feeding habitats, migration habitats, things like that. So thank you very much.	A thorough discussion of potential behavioral effects was provided in the Draft EIS/OEIS, Section 3.9.2.1, starting on p. 3.9-57.
Wright-01	Louise Mueller Wright. And I live on Madrona Way.  And I look right out my window at Penco Park, so I'm very connected with the water. But no one has mentioned no one has mentioned about all the little creatures that live on the sea floor and what happens when all the garbage is dumped on top of them and they are squished never to live again, happily again on the bottom of the sea. And they are very important to the ecological balance of the ocean. Thank you.	Potential impacts to marine plants and invertebrates were analyzed in Section 3.6 of the Draft EIS/OEIS.
	I'm Che Gilliland. I'm also a teacher, and I've been interested in marine biology and marine science for so long. And I went online to start looking at the EIS online and didn't get a lot done.	A full analysis of these and other marine mammal stranding events was provided in the Draft EIS/OEIS in Appendix E.
	But I found a few things, and my main concern is over the marine life, but also the impacts chemistry wise interactions with the actual ocean with the things that are being put in it. And I talked to one gentleman who said there was no depleted uranium, that it was sea floor that was the explosives, but I still think there's something, it doesn't just dissipate. So enough about that.	
Gilliland-01	And anyhow, when I was on the computer I found a couple of things, and there were just pages and pages of information, but I was really interested in the sonar. And the first thing is on a couple of the pages they went through all the different marine life all the way from the southernmost area all the way up to here, and so some of the things that we have here in Puget Sound in this area are obviously orcas, and it goes through and kind of lists on three pages what animals are rare in that area, blue whales, all the way up to Steller sea lions, different animals that are found here, but it didn't get into the very tiny ones on this. But I agree with you on that.	
	But on your plans for No Action, which is what I'm advocating for, Alternative 1 and Alternative 2, with the sonar it went through some incidents that had happened. And granted, there's only four or five listed on here, but with whale strandings. And with the sonar, and I'm not sure about the kilohertz, there's different amounts and decibels. The timing and location of the testing encompass the time and location of whale strandings in Greece, and this is with a NATO research vessel. In March 2000 in the Bahamas 17 marine mammals, Cuvier beaked whales and some other whales with the Department of Navy, I'm guessing, use of mid-frequency activities, sonar Navy ships were involved in tactical sonar exercises for approximately 16 hours on March 15th while emitting sonar pings approximately every 24 seconds. And so there's and it goes on to different things.  Mid-frequency acts of sonar and strandings began within hours of the onset	

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	In Spain, in 2006, active sonar training against the Spanish submarine, according to a pathologist, the likely cause of this type of beach whale stranding event may have been anthropogenic acoustic activities.	
	And so when I was going through, I noticed it says number of passive and active sonar efforts in the northwest training area, and under No Action for anti-submarine warfare, tracking exercise portable undersea tracking range, and it says the pinger MK-84 range pingers, sonar uplink, transmission MFA and HFA sonar, right now there's zero hours of this, but under Alternative 2, which is what you would like to have, it goes up to 180 hours, 150 hours, and then 42 hours for mine countermeasure exercises.	
	And so I'm just really concerned about the sonar, and if there's these mass strandings that I don't know how how that can be prevented. So again, I'm just here to advocate for No Action. Thank you.	
Grays Harbor, Wash	nington – January 29, 2009	
Schneider F-01	In a sense I'm totally overwhelmed by the presentation on the part of the Navy that fed us the summaries of thousands of words in a few minutes. And it's absolutely impossible to make rational sense out of it. One feels one is in the Kafkaesque situation where anything that one brings up will be commented on, prescribed or interpreted, avoided, et cetera.	The proposed action does not include any expansion of the existing training areas. There is no move into new training areas.  As described in the Draft EIS/OEIS, the offshore area is 122,400 nm² in size. This area includes sea space and airspace. The inshore area includes 875 acres of land area and approximately 12,000 nm² of
	My question is and it is not clear from any of the material I saw tonight that the area we are talking about is supposed to be enlarged, isn't it? Or is it the old areas? And what are the dimensions of the area?	airspace.
Schneider F-02	The thing that intrigues me most is the kind of combat threat all this is supposed to counteract. Whom are we erecting this system against? Silent running submarines from Iran or North Korea? It's almost like Dr. Strangelove. When Oppenheimer left office, the man who created the first atom bomb, we had 300 atom bombs, now we have 70,000. What are we doing with all of this? And who is going to pay for this?	Section 1.2.1 of the Draft EIS/OEIS describes why Navy training is critical. Discussions about military funding and similar policy are beyond the scope of this EIS/OEIS.
	I would like to use an analogy using some of your own language. You said that this is safe and that your models are relatively perfect and backed up by the latest science, yet, if you were to say that this medication is safe when it led to injury or mortality, it was only an exception, and it is statistically insignificant. And I think that's what you're doing with your sonar.	
Schneider F-03	You say the whales that have been beached are merely a matter of a few occurrences that happen now and then, yet it's exactly the exceptions that give us pause, because the exceptions usually goofs the rule.	Far from being "exceptions," marine mammal stranding events are much more understood today than just 10 years ago. Appendix E of the Draft EIS/OEIS is a Cetacean Stranding Report in which the Navy has provided significant analysis on recent stranding events. The Navy has learned from these events and has developed effective mitigation measures based on the lessons learned.
Schneider F-04	Another point that I would like to look at some enlightenment on, why did four supreme court justices rule against this project? And absolutely nothing has been said about that.	The Supreme Court has made no ruling concerning this project, nor are there any court cases pending on this EIS/OEIS.
Schneider F-05	As a matter of fact, this is an argument pro, and there are no arguments con. And I would like to see some arguments con. Are there non-scientific	Over 1,700 different individuals, agencies and organizations have submitted comments on the Draft EIS/OEIS. All of these comments and

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	organizations that have commented on this program? And where are their comments?	the Navy's responses have been included in this Final EIS/OEIS.
	I don't want to get in trouble with my wife, I better shut up and leave you with this thought; it's not a dirty limerick, but it's a limerick; "When humans who like to be free degrade our earth and the sea all the navies on earth won't be of much worth, for our world will be dead. Don't you see?"	
	On the other hand, I have the highest respect for our soldiers.	
	I'm not a speaker, and I am sorry for you having to listen to this jumble. I haven't any background information, so what I am about to say is what I learned from when I walked in the door here.  And from this EIS, quote, you want to increase the number of training activities and to accommodate force structure changes. This gives me just a chill of fright. That's an open-ended assignment. What is the civilian oversight structure that will go into the future with you with this endeavor? I didn't see any balances of power.	It appears that these comments are all in reference to the hand-out material provided as an overview of the Draft EIS/OEIS. All of the details and analysis requested in this comment are provided in the Draft EIS/OEIS.
	On page one you have an operating, quote, area over the Olympic Host National Marine Sanctuary. This does not seem at all right to me. It also is a restricted area. Restricted to the Navy only?	
Schneider A-01	Page three, sonar, quote, could lead to unquote, harm for, quote, marine animals. You don't know. You know potential affects of explosions on marine life. You are quote, evaluating, closed quote, and in a different spot you are quote, modeling. Where are your findings? Where are the conclusions from those findings? I didn't see them in the room.	
	Four, on page four of this book, what are sonar safety zones? I couldn't see a definition. That reduce quote, explosions at the highest sound levels, closed quote. It's so general it's meaningless to me.	
	Page six, quote, protective measures, closed quote, open quote, would provide a high level of protection for birds.	
	Page seven, what are your protective measures? Quote, developing a science, closed quote. Open quote, resource policy. Thank you. This is not good enough. On page ten after generalized statements you conclude always with, "No significant impacts," but no proof. Only for commercial fishing do you say there is potential for economic impact. Commercial fishing here can bear no more negative impacts.	
	I'm against this EIS because it's incomplete for me.	
	My name is Harold Brumstad, I'm just here representing myself.	This comment is duly noted. Alternative decisions are decisions that will be made by the Secretary of the New upon conclusion of the NEDA
Brumstad-01	I'm pretty impressed by the precautions that the Navy takes. I was a participant in many of these exercises and training exercises that you're proposing to do 45 years ago. And it's a lot different now than what precautions you're taking and what's being done to protect the environment which has become an important consideration for everything we do anymore, and it's important to all of our citizens.	be made by the Secretary of the Navy upon conclusion of the NEPA process for the NWTRC. This decision will take into account all factors from Navy training to environmental concerns.
	I'm not too sure I've often thought many times the impacts of military operations, and the way the battles that went on, and the South Pacific, the	

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	ships that were sinking, that were sunk in the Atlantic and the Pacific, and I've never heard of the any real impacts. That's not saying that that's a good thing, but you look at Pearl Harbor itself, it's a pretty good ecosystem at the time. And I don't know how long it took to heal.	
	But what I'm saying is that I'm familiar enough with the threats that unfortunately still exist in this world and of the training that goes on to face that threat. And I thank the Navy for what they're doing throughout the world at this time, and their precautions and the work that goes into ensuring that these protections are made. It's important to all citizens, and our environment is very important.	
	And I would just like to close saying that I highly support, proud to support the Navy in this effort to increase their training and be able to operate the high tech equipment that exists at this time. And I would support Alternative 2.	
Newport, Oregon –	January 30, 2009	
Obteshka-01	Yes. My name's Terry Obteshka. I'm a private citizen. I haven't had a chance to read the EIS so I have more questions than answers, but I do have concerns. One of my concerns is you go ahead with this project and if environmentaladverse environmental impacts do occur that there's going to be provisions that you'll cease or desist. Anotherand, of course, Newport, we have the off-shore fisheries is very important. Of course, the whales and the sonar and especially the explosive devices, impulsive sounds can cause instant and permanent damage to humans and any other creatures on the earth. We have an off-shore salmon fishery which is, you know, a threatened species. We have a tuna fishery. You know, for some reason, you scatter the bait fish of the tuna and they take off, there could be adverse impacts economically on the local economy.	The proposed action includes increases in the number of certain activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or at-sea time for the ships. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.
Obteshka-02	And, of course, I would hope that, you know, if these operations do cause negative impacts in the fisheries, there would be some kind of a takings provision where the fishing industry would be compensated for their losses.	The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals, 3.14 - Socioeconomics).
Obteshka-03	And inOregon's done a lot of work on mapping the ocean, discussions on marine reserves and off-shore energy, buoys, maybe aquaculture in the future. This is just another impact, another use of the ocean and I don't know how it's all going to fit in. In closing, I would wish you to reconsider theyou know, no change option to what you're doing right now.	In response to the Navy's use of the ocean, it is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Carlson-01	Well, first of all, thank you so much for being here and I would like to extend my thanks to all of you for your service to our country and I appreciate that. I guess an example of feeling comfortable that you're taking care of business is that you had that spare mike right there. I was impressed.  Jim Carlson. I'm actually a resident of Tillamook County which is the next county up fromfrom Lincoln and I'm here tonight wearing two hats. One being that I am the central coast organizer for a environmental or	The proposed action includes increases in the number of certain activities while aircraft are airborne and ships are at sea, but does not necessarily correspond to an increase in either aircraft flights or at-sea time for the ships. Therefore the level of Navy activity proposed is not significantly different from the level of activity over the past several decades.  It is important to note that there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored

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	conservation group called Our Ocean and I'm also representing five different sea pacts in Tillamook County that I think some of youI've already explained what that is, but just for the record, these are groups of citizens that come together once a month and they discuss land-use and near-shore issues that are coming toyou know, to fruition in our area. And so it's an advisory group only but we advise the county commissioners and the County Planning Commission on concerns that we have on not only on the land but the near-shore as well. There's tremendous amount of information for me to digest tonight. Unfortunately, I wasn't really given too much of a lead time to know that this hearing was taking place so I will not probably give any specifics as far as what I feel is appropriate or not appropriate activity as far as the military is concerned on our coast. But I would want you folks to understand that we as Oregonians right now are given the task to take another look at our near-shore and how we're going to use it, whether that be undersea cables, whether that be marine reserves, wave energy, aquaculture projects and on and on and these are all kind of new ideas to ourto Oregonians so this is just one more piece of the puzzle that we need to take a look at.	throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Carlson-02	So my recommendation is that the fact that I'm the only one here from Tillamook County that I'm aware of that's able to come to this meeting or, in fact, was aware that it was taking place, that you reconsider your deadline because that gives us less than a little over ten days to first of all, to go through all this information that I'm sure you guys have lived with for a long time but it's new to us. And so, respectfully, I would ask that you consider pushing that deadline out to at least a minimum of 30 days to give us an opportunity as coastal Oregonians to decipher this information and give you ayou know, an educated guess on what wehow we want to proceed here. Thank you so much.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Jincks-01	My name's David Jincks. I live at 1260 Southeast Wade Way in Newport, Oregon. I'm here representing Midwater Trawlers Cooperative. It's a fishing organization that has vessels that participate in the fisheries on the West Coast and Alaska. I'm also going to represent Pacific Whiting Cooperative and United Catcher Boat Association from Seattle, Washington. They're also fishing organizations that fish these areas between Alaska and the West Coast.  The main fisheries that we participate in on the West Coast is the Whiting Fishery. It's a pelagic fish and it migrates from California north up the coast past Puget Sound into Canada before turning around and heading back to California. These fisheries take place May 15th sometimes running into November 15th, sometimes into December. It's a full summertime fishery and intoyou know, some of the early wintertime so. The depths these vessels fish are from probably 40 fathoms out to 800 fathoms. They're a wide-ranging fleet. They'll range from the Oregon-California border to the Puget Sound. Theythey range in size. It's probablythisthis fleet here is probably 68 vessels and they range in size from 70-foot to 550-foot. It's an economic engine for the West Coast. Um, economic indicators indicating in the last couple years 165 million dollars return to the coastal communities between	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.  Of primary importance, there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.

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	Oregon and Washington. So it is very important to us and that the areas are open for us to fish in. So I'vethis is pretty much new to me. I just got called an hour and a half ago that this was going to be a hearing here so I wasn't really prepared to speak on it, but I'm going to do the best I can. I'm going to just make a statement that I know from talking to several of you in the hallway which the information is very good. Thank you.	
	And it's the typical EIS that's being done it looks like. And though you've been working with National Marine Fisheries Service, the National Marine Fisheries Service doesn't always work with us very well and so the information doesn't trickle down to the fishing groups. And so we're asking for more coordination with us, with the local fishing groups. There's several of us that represent some of the larger fishing industries and also some of the other ones. I mean, I'm just representing a small bunch of the fisheries. You have the crab fisheries, salmon fisheries, long-line, pot fisheries. I mean, it's a tremendous amount of fishing that goes on in these areas out here all year round when you get into them. I'm just speaking about the whiting fishery for the May through December. But through the rest of the time, there's a tremendous amount of ground that's being fished out here all the time.	
Jincks-02	And so what we're asking for also is the February 11th deadline on written comment is coming right up on us which we didn't know about. I didn't know about the EIS. I haven't looked at it yet so. And, um, I think that under NEPA, I think that we should be allowed a little more time because it is a very large impact that is unforeseeable to us what the impact will be.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Jincks-03	I mean, I look at some of the information out there and it says that there could be potential economic impacts to commercial fishing from use of portable undersea tracking range which Ilike I say, I haven't read the EIS so I'm not aware of what thewhat the portable undersea tracking range is going to be, how much ground it's going to take up, what the notice would be to mariners to move out of that area and how long that wouldhow long that would be. 30 seconds remaining. Well, thank you. Anyway, so that'sbriefly, that's my statement and I'd hope that over time that you would instead of engaging with National Marine Fisheries Service, you might engage with the fishermen that actually use the ocean. Thank you.	Potential economic impacts resulting from the Navy's proposed actions are described in Section 3.14 of the Draft EIS/OEIS.
Jincks-04	Yes. My name's David Jincks. I spoke earlier. I'd like to make one more comment and that has to do with the fishing fleet again and if this is does become a foregone fact and this is a reality for us, we'd like to have in the records that hopefully you'll work with us and our navigation programs as far as updating us on these zones and areas. There's several different navigation programs that are used on these vessels. Some of us use Globe, Olex, but local fleets around here use many different other types, too. But most of the chart companies areand these navigation companies are willing to update our nav programs for us with closures and these areas. We use them quite a bit up in Alaska for closures and other areas, but hopefully you will pay attention and look into this because it isit would be very helpful to us. Thank you.	The areas in which training will occur under the proposed action exist on NOAA charts. No new areas would be developed as a result of this EIS/OEIS.

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Thompson-01	My name is Terry Thompson. I represent the Lincoln County Commission and also Undersea Cables. And I'll start off by telling you why this is a little passionate for me. I've been about 4,200 days at sea in my life. In that time, I've known eight vessels that have vanished because of submarine activity and five men have died. Now, I consider that a pretty serious issue. Now, to know it's the U.S. Navy or another vessel isno vessels ever come to the surface for us to be able to identify, but when you lose friends at sea because of activities by someone underneath the water that's obviously running a vessel that's big enough it can tow a 75-foot sideways at eight knots, it's obvious there's somebody that needs to work on communications. Now, I cannot say who it was, but one of the things that we have tried to pride ourselves and the West Coast Fleet on this coast is the development of an open communication system.	There have been no documented instances within the NWTRC of U.S. submarine entanglement in fishing gear, causing damage to the fishing vessel. In the case of an incident as described, fishermen can make an admiralty claim for reimbursement for any damage.
	And this meeting today represents an opportunity that we've never had before and that's to actually communicate with you about some of the facilities and personnel and equipment that we use in our fishing operations that we arehave off shore. That communications, I think, can further the lack ofcan stimulate a situation so we won't have conflicts in the future and I very much applaud you for that.	
	We represent about 100,000or excuse me100 million dollars' worth of fisheries products just in Lincoln County. It's a major business for us and anything we can do to help communicate between you and us can only help our communities.	
Thompson-02	One of the things that by looking at the EIS that bothered me the most was the potential for a minefield to be built out here and a permanent closure. And then when I looked back and say there's no socioeconomic impact to the fishing industry, well maybe not as it is today under what's there, but if you put a minefield in there and tell us it's permanent and we can't go there, it definitely has an impact on our community. So I think you need to rethink what that social impact might be.	The Draft EIS/OEIS did determine that an economic impact could result based on the placement of the both the Portable Undersea Tracking Range (PUTR) and the mine training range. The Navy understands the impact that placement of either of these could have on the fishing industry and will include representatives from fisheries in location decisions. Further, the placement of the mine training range will require a separate analysis that will also include these representatives.
	David Jincks just talked about the whiting fishery. It's one that would very likely be in conflict with you because they haul such big nets and they move at high speed in the ocean. Whether you're using an ROV or a potential minefield, I'm sure that within a short time, we'll have one of your devices in our nets.	
Thompson-03	Another area that bothers me is the amount of shells and marine debris the Navy leaves behind. When I fished off San Francisco trawling, I found parts of old airplanes that had been left by the Navy when they came in from World War II. Stainless steel landing gears, pieces like that, and if you're going to shoot debris into the ocean in shallower water inside of 700 fathoms, it won't be long before we're going to have that debris. Our fishing industry has done a lot to try to clean the bottom of the ocean. We actually work now with NOAA to remove old fishing nets. We do all kinds of operations to bring stuff ashore instead of dumping it back overboard and for the Navy to leave marine debris on the bottom, it's not good for our operation and I'm not sure what the effects would be with some of the sea life but some of it would	Most of the training conducted by the Navy that involves expended materials occurs far out to sea, typically in deeper waters. Table 2-10 in the Draft EIS/OEIS shows the materials used in the Operating Area. Of the materials left behind, only the sonobuoys and the BDU-45 bombs would be of a size that could get caught in fishing nets. The remainder of the items are either recovered (such as targets), are small (such as small arms rounds), or are destroyed and fragment into smaller pieces (such as the MK-82/83/84 bombs.

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	probably be impacted.	
Thompson-04	One of the problems that also bothered me about this meeting was the lack of communications in this meeting being held. I didn't know about it until yesterday and I immediately went to the Governor's Office who didn't know about it. Apparently, Department of State Lands had some knowledge of it. I contacted the Undersea Cable Committee which is the main communication system for the Trawl Fleet today and they had been involved early on but they weren't aware that this meeting was here and the general public in our area didn't know that. So I've gotto cut this short, I'll make one final comment. Because of that lack of communications that I think you guys meant well in your effort to communicate with the public, I think you need to extend this period so that we can have time for the public comment and a lot more local people to be engaged.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.
Thompson-05	Terry Thompson again. Lincoln County Commissioner. There's a couple of areas in specific in the EIS I'd like to cover. One is there waswhen I examined the document, it looked like to me, like the Navy document did not have a very good understanding of the fishing industry. I'll give you an example. It discussed in one area where salmon are trawlers and trollers fish for flat fish. Now, that's a basic error that shouldn't be in a document like this. Trollers fish with wires and they fish for salmon and Trawlers fish for bottom fish. There were several things in there related to the commercial fishery and I suggest that you go back and get with some commercial fishermen and work this document a little better and the contact point may be through the Undersea Cable Committee. I mentioned that that exists on this coast. It's a group of trawlers that communicate up and down and that have probably been involved in every fishery and we have a contact point with the manager who really understands fisheries and could work with you to improve some of that information related to the fishing industry. It can only help.	Thank you. The errors in Section 3.14 concerning trollers and trawlers have been corrected. The remainder of the section was reviewed for similar issues.
Thompson-06	Another area that bothered me wasn't in there was that today under our modern management system, we've made agreements in trawling which is the one you're going to most have a chance to have conflict with that I'll restate the comment. It's now closed outside of 700 fathoms. So that's a very important factor when you're working. The only boats that'll probably be outside of 700 fathoms are a very occasional whiting boat and a tuna fleet. So there's not a lot of activity out there beyond 700 fathoms by our fishing fleet. And that should do it, but good luck. I hope you'll try to rework that section related to the fishing industry.	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.  Of primary importance, there are no restricted areas in the NWTRC.  Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Gargano-01	That's correct. Good evening. My name is Marie Gargano. I live in Depoe Bay and I live right on the water so your 12-mile buffer between your zones and my house is very important to me. I will preface what I say by saying and agreeing with previous speakers; I found out about this hearing on Monday	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  To ensure the public had ample opportunity to comment, the comment

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	and that's through an organization that I belong to called Oregon Coast Watchers. I'm not here representing them, but I'm here to gather information for them and also for another organization called Oregon Coast Watchor Oregon Shores. Pardon me. We did not have a lot of notice for this hearing and I don't know what your mechanism is for notifying the public, but I have	deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy will continue to review the means by which it can most
	been in this room for topics that are far less consequential where there's been standing room only. So I would say looking out and seeing all these empty seats, to me, that's an indicator that there really hasn't been adequate notification to the public.	effectively and efficiently provide proper notification of future events.
Gargano-02	I'm going to read some excerpts from the January/February 2009 newsletter for the National Resources Defense Council. I'm a member of that organization and I'm sure all you gentlemen are very familiar with them because they have had numerous suits against the Navy. Ruling 6 to 3 in a case brought by the NRDC, the Supreme Court has recently struck down two important safeguards that protect whales from dangerous mid-frequency sonar during naval exercises off the coast of California. The decision —quote, the decision places marine mammals at greater risk of serious and needless harm said Joel Reynolds, Director of the NRDC Marine Mammal Protection Program. The ruling was very narrow, said Reynolds. It left in place four vital safeguards that we have won in the lower courts. As a result, the Navy's sonar ships will still be required to avoid key wild —key whale habitat in a 12-mile coastal zone and also to use marine mammal lookouts, to power down its sonar when marine mammals are within a half a mile. I have not seen the EIS because I'm seeing the website right now for the first time. I'll quote again from this newsletter. The Navy itself has estimated that the California sonar drills will disturb or injure 170,000 marine mammals and cause permanent injury to more than 450 whales.	The Supreme Court has made no ruling concerning this project, nor are there any court cases pending on this EIS/OEIS. The information cited in this comment pertains to activities on a different range complex.  The potential marine mammal exposures resulting from Navy training activities in the NWTRC were fully described in Section 3.9 of the Draft EIS/OEIS.
Gargano-03	And I know from other organizations that I belong to there is certainly suspect that the Navy has been the cause of marine mammal deaths including whales.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Gargano-04	So one of the questions that I have is this was a suit for the coast of California. What are the statistics relevant to the Oregon coast and will the Navy be following these same vital four safeguards for any activities off of the Oregon coast? Despite this legal setback, the trend is definitely toward a more whale-friendly Navy, said Reynolds. We've made enormous progress over the past decade in getting the military to study the impacts of sonar and put precautions in place. So you are going in the right direction, but because it's whales, we don't know when there are going to be fatalities. We won't see the carcasses on land. They will sink and they'll be gone. So I would really question what's going to happen with our whale population off the coast of Oregon. Thank you very much.	The potential marine mammal exposures resulting from Navy training activities in the NWTRC were fully described in Section 3.9 of the Draft EIS/OEIS.  The mitigation measures the Navy uses during sonar activities was described in Section 5.  The U.S. Navy has conducted mid-frequency active sonar activities for decades in the NWTRC with no resulting injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises as proposed in the Draft EIS/OEIS.
Gargano-05	Marie Gargano, Depoe Bay. I heard the one lady say that she encourages	An additional meeting was held in Tillamook, OR on February 26.

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	you to have a rehearing, a second hearing. I think you have heard from a good number of speakers that the notification here along the coast was grossly inadequate and I know that's probably not your fault, but I think we need to have another hearing so just extending this by 30 days, I think, is inadequate, um, and to encourage that to happen, I'm going to be calling the Governor's Office tomorrow and also my two senators and ask them to intercede with the Secretary of the Navy to try to make that happen. So we may see your smiling faces back here again, but I think that that's really what needs to happen because you come back again and this room is going to be filled to capacity. I can promise you. Thank you.	
Mate-01	Good evening. And I want to add my thanks to your coming here and including Newport in one of your areas to hold hearings and public comment. I'm very grateful for that and I'm also grateful to you gentlemen for upholding the finer traditions of the services in protecting our well-being. I think we're all appreciative of the job you're doing on behalf of the United States. Because these are important matters, I do think that what we've heard tonight and what I've experienced in this last week, I would very much hope that you'd extend the comment period by another 30 days. The material is —that you've put together is in many areas wonderful but at 1,068 pages, a bit daunting for most of us to get through.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Mate-02	In my particular area, I'm representing myself tonight as a citizen, but I have considerable marine mammal experience. I do not represent Oregon State University, but I do direct the Marine Mammal Institute here and I've been in Oregon doing marine mammal work since 1968. I can tell you that there are some things in the document that will actually require some reassessment. Some of that is local knowledge. Some of it's very current. And I had the opportunity to speak during the time period before this group came in and I appreciated the candor of several of the folks with me and the expression also of the difficulty for those of us who view this professionally in assessing impact because risk is a combination of a species, the time and the place. And the time and the place is a very difficult thing for you to be specific about for a variety of reasons and we appreciate what some of those are.  But just simple things like knowing that gray whales are here during the summertime and near shore, that we have blue whales and humpbacks off shore. Because we have a narrow continental shelf within a very steep slope, we have very close access to deep water. So a lot of the species that are of public concern and are a part of the debate going on about the impacts of sonar and other activities are going to be a part of our concerns and these include beaked whales and sperm whales, other deep divers where sound channeling can occur in deep waters. I think there are a number of things that we have to think a little longer about as a community and it'll take a little bit of time for this to come through.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. This density estimate study was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study. This study included NMFS-accepted densities of all species of marine mammals and sea turtles known to inhabit the waters of the NWTRC, including gray whales, humpback whales sperm whales, and beaked whales.  This information was used throughout the analysis of potential impacts to marine mammals in Section 3.9 of the Draft EIS/OEIS.
Mate-03	When we start talking about permanent threshold shifts that are based on 50 percent tympanic membrane ruptures and not consider that underwater detonations may also be a source of that but it's just related to sonar. There are things like that that'll take time for people to evaluate for themselves for a	The full analysis of the effects of sonar were included in the Draft EIS/OEIS in Chapter 3. The analysis of each resource area is found within its individual section (3.6 – Marine Plants and Invertebrates, 3.7 – Fish, 3.8 – Sea Turtles, 3.9 – Marine Mammals).

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	little while. Or why lung injury may only be associated with harbor seals and yet they're the very nearshore species.	The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Mate-04	There are aspects related to fish where we aren't seeing a very thorough impact assessment with regard to active sonar activities in this document and I do know that some of the consultants you've had are experts in some of these areas so I would like to see some of that more fully explored in the Final EIS.	There is a very thorough analysis of potential impacts to fish from Navy activities in the Draft EIS/OEIS in Section 3.7. Without more specific comments, no further response can be offered.
Mate-05	I think that there could be a variety of aspects of getting ready to start these activities where you're trying to assess whether there are animals in the region where you have ten minutes of helicopter time devoted. Quite clearly that's not going to be adequate for deep diving animals that may spend 45 minutes on a dive like sperm whales or over half an hour like beaked whales. So some of those things may need a little more development in terms of your pre-activity, um, assessments and also probably in your mitigation processes.	There are numerous mitigation measures spelled out in Section 5 of the Draft EIS/OEIS. The Navy does not rely on any single measure but feels that the entire suite of measures are quite effective at reducing potential harm to the marine environment and the species that live within it.
Mate-06	I think at a minimum, the scientific community would like to know that after the fact, your operations will know when and where those occurred so that anything that may come up, we could start to think about some correlations. These are things that can clear yourall our collective consciousnesses (sic) as well as knowing the correlation is not cause and effect. We've had strandings of beaked whales along the Oregon coast for years. As recently as last week, we had sightings of L pod, the southern orcas, right here off Lincoln County in the last two weeks and being a listed species, that's a concern. Finally, in summarizing, I'd just like to say that the mitigation process kind of goes both ways about getting ready to do things and then after the fact looking at possible effects. So we need to be able to do that. Thank you very much.	Also in Section 5 of the Draft EIS/OEIS is a discussion of conservation measures, which includes monitoring of marine species in the NWTRC. The Navy does keep record of active sonar use for exactly the reason stated in the comment—to establish or rule out correlation with sonar and unusual marine mammal events.
Mate-07	Bruce Mate again and I just want to add a few comments. One is that there are several other noise makers in the ocean who are held to a different standard of accountability and we understand why that would be. But, for instance, the National Marine Fisheries Service establishes 160 decibel level for the exposure of marine mammals as an indication of where 50 percent of the population is going to be behaviorally disturbed. And that means cutting off feeding behaviors or doing something different than they might normally be doing. At 235 decibels and knowing that this is a logarithmic scale, the kind of noise level that the Navy is proposing to make in this area is substantially larger than that which would be regulated in other industries. And I guess it would be really nice to get some scaling for those who are less physics oriented and the circles you have of influence for temporary threshold shifts and permanent threshold shifts, if you could provide for the more general community some sense of what scale that is and the frequency ranges you operate in so that we would be better informed as a public to reflect back to you what we think of that, that would be very helpful I think.	The 235 decibels (dB) referred to in the comment is a source level. The 160 decibel level in the comment appears to be in discussion of received level of the sound. The Navy's most powerful sonar emits at a maximum 235 dB (source level). As described in Section 3.9 and in Appendix D of the Draft EIS/OEIS, the Navy's analysis applies criteria provided by the National Marine Fisheries Service. Section 3.9 provides a complete description of possible behavioral effects as well as physiological effects to marine mammals exposed to different levels of sound.  Table D-12 in Appendix D of the Draft EIS/OEIS displays the ranges at which certain received levels may be detected from the 235 dB source. As can be seen from Figure D-26, this Navy considered received levels well below the 160 dB level to potentially cause behavioral harassments. A "basement" level of 120 dB was used.

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Mate-08	And when you look at something like the summary table on effects on 3.9-13, most of that table is populated with assessments that read either perhaps no effect in your judgment or as several of them are, MA or not enough data basically, or MA, may affect, I'd say that those kinds of sort of broadsweeping three categorical choices don't leave a lot of leeway for people to make good interpretations for themselves about what you might really expect to happen. I'd like to see it quantified a little more. I know you've done these things in terms of modeling in terms of the populations, the seasonality, their sensitivity and so forth and I commend you for the depth of detail that's in the Draft EIS, but I would like to see you go a bit further in this regard for people who are less familiar with that kind of information. Thank you very, very much for coming. I do hope we see you again and whether it's in this kind of a forum or in an opportunity to have more dialogue with a community that feels very not only attached to this area aesthetically, but a livelihood and a connection with the wildlife that's here. Thank you.	Table 3.9-13 in the Draft EIS/OEIS was designed as a simplified summary table, while the more detailed analysis was captured in the previous tables (Tables 3.9-6, -8, -9, -10, -11, and -12) and in the text of Section 3.9.
Mills-01	My name is Charlotte Mills and I live in Tidewater, Oregon, and I'm a member of Oregon Shores Conservation Coalition, one of the oldest citizens groups that have had attention to the marine issues and we were very prominent in getting the beach bill. I'm also a member of Our Ocean like the gentleman was here from Tillamook and Our Ocean has had some action teams. We've been working for two years to get the marine reserve networks here and our group has recommended nine sites along the Oregon coast. We've got 362 coastal miles.  And along those 362 coastal miles, we have proposed nine of them. Our pod, our group was proposing the marine reserve between Haceta Head and Cape Perpetua. We called ourwe were the Yachats Pod on that. So I only gotfound out about this meeting at 4:00 yesterday afternoon and a friend who was on the Internet got some of the information to us. And so Oregon Shores Conservation Coalition was not on your list of organizations that got notified, nor wereI don't believe Our Ocean got notified either and I can tell you that if either one of those organizations had been notified, this would have been full attendance tonight. So I want to say most importantly that your NEPAyour National Environmental Policy Act, your notice and comment efforts have been inadequate. They did not reach not hundreds but thousands of people along the Oregon coast. Many of them are property owners along the coast. Some of them are fishing communities. Some of them are marine commercial activities as well as private property owners. If you had notified the Oregonian or the Associated Press, one of those organizations, we'd have had more people here tonight. So my recommendations areI'm going to go beyond extending the comment period. I believe you should have another public meeting. I think you need to have it reschedule this and notify the right media, notify the right organizations and have another one. I don'tand then extend the comment period. Those about cover it for me except that, you know,	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings. The Associated Press was given this information in a press release, however the Navy has no control over which newspapers choose to publish the release. However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Further, as requested by this comment, an additional meeting was held in Tillamook, OR on February 26.  The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.

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	activities, all three of those, and our marine reserves are only going out to the three-mile limit and we're concerned about the kelp forest and the big fat female fish who seek shelter in those kelp gardens to feed and to spawn, and if there are going to be explosives, if there are going to be minefields, if there are going to be this whatever undersea tracking range for anti-submarine training, all of those off-shore activities, I don't think we need to even guess. I know they will have an impact on these marine reserves we're proposing. Thank you very much.	
Burke-01	Hi. My name is Patty Burke and I'm from Waldport, Oregon, and I'm speaking as a citizen as Bruce is, but I'm also kind of involved in fisheries management here. I do work for NOAA and I also only just heard about the meeting yesterday. So I do think it would be beneficial to extend the comment period.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Also, an additional meeting was held in Tillamook, OR on February 26.
Burke-02	For example, the program that I run is responsible for serving fisheries up and down the coast. We've got transects in all the areas that you're talking about and next week we're meeting in Santa Cruz to talk with the National Marine Sanctuaries Program about access for science and for research in those areas. And so I know that we haven't had those dialogues with you and I think that it's important that we try to at least acknowledge the good work that you've done by giving us some time to do some of the interactions with you locally on the issues. So thank you very much.	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. This density estimate study was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.
Horning-01	Thank you for the opportunity. My name is Marcus Horning. I speak as a resident of the City of Newport and will actually be providing most of my comments probably by on-line submission but would like to add my name to the list of many this evening who have commented on the fact that it is very laudable that you're reaching out and having this forum but sadly many of us were not really informed of this until recently. So I also only found out about this yesterday and would like to take the time to really read the EIS in detail to be able to understand it as much as possible and then provide comment based on my opportunity to read that in detail. So I would also like to ask you to extend the public comment period, if possible, and the suggestion of 30 days that several have come up with sounds like a very reasonable one.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Also, an additional meeting was held in Tillamook, OR on February 26.
Eureka, California –	February 2, 2009	
Higgens-01	My name's Pat Higgens.  Okay. I'm an elected official. I'm with the Humboldt Bay Harbor Recreation and Conservation District. We concern ourselves not just with development and health of the bay and recreational opportunities but also with fisheries near shore. So we've been working with the State of California and the Ocean Protection Council here to try to get them to better assess rock fish populations out here so that we aren't shut off from fishing for conservation reasons when in fact there is no need.  This my interest here this evening is in marine mammals. We have four submarine canyons here from the Trinity Canyon to the Eel River Canyon off	The Navy funded an independent study of the marine mammal and sea turtle densities within the NWTRC. This density estimate study was completed in cooperation with the Southwest Fisheries Science Center, which is the research arm of the National Marine Fisheries Service. Seasonal data, where available, was considered in this study.  This study included NMFS-accepted densities of all species of marine mammals and sea turtles known to inhabit the waters of the NWTRC.  This information was used throughout the analysis of potential impacts to marine mammals in Section 3.9 of the Draft EIS/OEIS.

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	directly offshore here to the La Gorda Canyon and the Mendocino Canyon, so that's very, very extraordinary rich area in the ocean. And, therefore, also very, very well populated with marine mammals of all different types.  And I'm going to register concerns about, you know, when those exercises would be conducted because of the frequency of use and the richness of the	
	biological fauna offshore here and in near-shore areas. We have, you know, thousands of ten thousands of marine mammals that are potentially affected.	
Higgens-02	And I'm a little concerned that you want to reserve the right to train anywhere in this geographic area when in fact I would think that maybe some of these areas should be off limits because there's too great a risk and mitigations still may not be sufficient in terms of major disruptions to these populations.  I need to study this question more.  I'm surprised there aren't more people here, though, because I think that there is a substantial disfavor in this community as a whole with the inordinate amount of money we're spending on the military. And we think that at some point there should be some reconsideration because certainly there's risk, but if we live in a fear-based culture, we may bankrupt ourselves with these military expenditures if they're unlimited.	The potential marine mammal exposures resulting from Navy training activities in the NWTRC were fully described in Section 3.9 of the Draft EIS/OEIS.  The U.S. Navy has conducted mid-frequency active sonar activities for decades in the NWTRC with no resulting injuries to marine mammals. Given the natural variation of marine mammal location over time within the NWTRC, operational variability of Navy mid-frequency active sonar operations, and the fact that there is little scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from mid-frequency active sonar training exercises as proposed in the Draft EIS/OEIS.
Higgens-03	Also, we're troubled by the Supreme Court's decision that you guys set precedent over whether or not the Endangered Species Act is enforced.  I'm here tonight to see that this is properly mitigated and trust that we can negotiate here with you and make sure that it doesn't have undue harm on our local resources.  But the question here, too, is, you know, we can always trump the Endangered Species Act by saying, There's a dire need because, otherwise, we're going to be attacked and, you know, I I think if we live in a fear-based culture, it won't lead to enrichment necessarily or longevity.  The last part was just Pat Higgens. That wasn't anything to do with the Harbor District. I wasn't representing anyone but myself.	The Supreme Court has made no ruling concerning this project, nor are there any court cases pending on this EIS/OEIS.  Also, the Navy is in full compliance with the Endangered Species Act (ESA) and is in consultation with the National Marine Fisheries Service with respect to ESA listed species as well as all marine mammals protected under the Marine Mammal Protection Act.
Higgens-04	Pat Higgens coming back for the second time.  Some lethal effects you know, if we don't radio tag these marine mammals I guess I'll have to dig into it's a hundred million dollars' worth of studies that you guys have done. Is that all public?  I'd like to read to see whether you got marine mammals tagged because you can just because you don't kill them, doesn't mean you're not disrupting social behaviors and therefore, inordinately affecting their ability to reproduce which then ultimately has the same effect on a population level and not on an individual level.  So I'm very concerned about disruption of social grouping and behavioral patterns because these things have tried and true, tested patterns that have worked for millions of years, and, if you knock them out of their with sound, then they're no longer in the environment with which they go along.	Marine Mammal tagging is not done by the Navy. The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.

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Bawden-01	Thanks for coming tonight to the Navy.  My name's Mary Bawden, and I am I live here in Eureka. And I've worked 29 years at DMV. I worked a few years at Fish and Game just as a clerk, but I just I guess I'm just curious: Has there been any any studies that show that this type of you know, the ordnance and blowing up things, does that cause anything like those dead zones that you hear about places where, you know, nothing nothing lives.  And I was just wondering if there's any if there's any if there's any correlation there between a lot of, you know, bombs and stuff and just where, you know, there's no fish anymore, just something like that.  That is my question.	The alternatives in the Draft EIS/OEIS were thoroughly analyzed for their potential effects to the environment. The issues raised in the comment were all included in that analysis. The analyses of the various resource areas considered the best available science, citing hundreds of pertinent studies. The analysis consistently found either no impacts or very minor impacts.
Anderson-01	My name's Gordon Anderson. I've lived here locally for the last 35 years.  And I'm just very concerned about in this assessment of whether this is environmentally positive. I'm very concerned for the marine mammals and the sonar relationship to them because of it's known that there it's very highly likely there's correlation with the use of it and beaching and the death of many whales.  So after talking with the gentleman here, he your placement of the your stance is that you're studying it. You're concerned that mammals and all.	Appendix E of the Draft EIS/OEIS provided a complete analysis of the relationship between sonar and marine mammal strandings.
Anderson-02	I one thing that comes to me is that I would like to see good, good records of the times and intensities of the use of the sonar so that if something does happen, it's detectable that there could be correlations of it would be usable and documentation of the science of it and the connection.  I know you guys are going to do what you're going to do, but it would be nice if it was, you know the rest of the animals on this planet are more important than our national security, which is being used to take away safeguards of late, so by the Supreme Court so I'm just very concerned with the marine mammals, and that's longevity.  I hope that you'll take that into consideration, the documentation and making it so it is available so that it could be used not just certain testing at certain times.  Okay. That's it.	Also in Section 5 of the Draft EIS/OEIS is a discussion of conservation measures, which includes monitoring of marine species in the NWTRC. The Navy does keep record of active sonar use for exactly the reason stated in the comment—to establish or rule out correlation with sonar and unusual marine mammal events.
Tillamook, Oregon -	- February 26, 2009	
Buell-01	My name is Linda Buell, L-i-n-d-a B-u-e-l-l. I represent the Fisherman's Advisory Group for Tillamook. And I'd like to thank the Navy for coming here tonight and giving us the opportunity to ask questions.  You answered almost all my questions. I have one comment to make, and that would be, if you're in our area and going to deploy ships, that they don't	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase
	affect fishermen very much. Did you contact, perhaps, the Oregon Department of Fish and Wildlife and the local fishermen's committees up and down the coast.	in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.

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	There is a fishermen's committee in Newport and so forth, to ask about our seasons? As an example, we have a halibut season that is only about twelve days in the spring. If you were going to do some activities on those days and didn't let us got out for halibut, that would cost a significant part of our wage. That is the only comment that I have to make. Thank you. I'm sorry, I should add that there are other seasons, too, so that is why you should contact the local agencies.	Of primary importance, there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
Kenney E-01	My name is Edna Kenney, E-d-n-a K-e-n-n-e-y. I thank you, the Navy, for coming tonight. I just want you to know we're in favor of all this. I'm very pleased that they are doing the studies and all to make sure everything is all right. But I feel that our Navy, our troops, they need proper training and proper exercise. The equipment that we have today is so different from what we used to have, and I feel that they need to be trained with the equipment so they can do the jobs they are asked to do. We do have four children that are in the Navy at this time. They travel all over the world. We never know where they are until they're back. Their lives are in danger many, many times, and it's nice to know that they know what they are doing when they are there and do have the equipment to use while they're there and they know how to use it properly. Thank you.	Thank you for your comment.
Kenney R-01	My name is Robert Kenney, K-e-n-n-e-y, and I'm a Navy veteran. As my wife just said, we have four kids in the Navy. If they don't get the proper training, their lives are in danger. We need them to have the best and the proper training. We were fortunate in that we rode a destroyer up from San Diego to Everett, Washington, on a family cruise. It was very impressive to see how they were environmentally conscious from the polish to the brass. The grandson got a chance to view that. Material was not thrown overboard, it was put into containers for when they got to the dock to go into dumpsters. When we did pull into the docks, the first thing that went around that ship was an absorbing boom so if there was any spills, leakage, on that Navy ship it would have been contained. I was very impressed with how the Navy was environmentally friendly.  We need to have the best training that you guys can possibly give them, and we support you 100 percent. Thank you.	Thank you for your comment.
Vandecovering-01	Welcome to the Navy. And I thank all of you for coming. I'm Lorraine Vandecovering from Garibaldi. My family was in the fishing business since 1957 from Alaska to California. And I would like to have the Navy know how much we appreciate them here working so well with the environment. That is very important to us because our food production off the ocean depends on the environment. And, also, I would like to say that our fishermen are very environmentally conscious. They bring a lot of the they bring all that they possibly can and some of the stuff doesn't it's irretrievable.  And we were at one time also in the charter business. We had the largest family-owned fishing fleet on the Oregon coast for a number of years. And during that time we were well, Teddy Roosevelt established Three Arch Rocks as a national game preserve. And for a while we would very carefully take tourists around to Three Arch Rocks to see all the rare birds and the	There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.

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	common birds. It was an enormous draw for people all over the world. And all of a sudden we were restricted from going over there. I'm retired, so it's been a few years.  We were restricted from going very close to the rocks. Now, my question is,	
	how would the – how would the sonar and activity not affect our seafood if it – if we were restricted from going too close to the rocks? And, there again, our tourist business really benefited by having these international guests be treated to such a sight. Thank you.	
Carlson-01	Thank you so much for coming to Tillamook.  I was at the meeting in Newport last month, and I basically found out about that meeting the day, the morning, of the meeting, and unfortunately was a little bit disappointed that there either wasn't appropriate outreach for this meeting. In this part of the world, we usually give people at least a week, usually a couple weeks lead time in the newspaper and radio and whatnot in order to put their schedules together so they can come to an important meeting like this.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  The Navy was asked in the second week of February by the Oregon Congressional Delegation to hold another meeting. By the time the Navy could coordinate a meeting location here in Tillamook, and confirm its availability, only one week remained to inform the public. The Navy agrees with the importance of notifying the public early, and in fact had
	Unfortunately, I believe the newspaper came out yesterday with an ad informing the public to this meeting. I obtained a postcard, I suppose from the mailing list that I got on from the last meeting this morning, so I would hope that other meetings that you have take into consideration that people need a little bit more lead time so they know that it's an important issue to calendar and speak to or get informed on.	done so for all previous meetings in which the schedule was planned in advance.
Carlson-02	Which brings me to the fact that this, the EIS report, is a large document, it's very complicated and technical. And it usually takes the average person quite a while to decipher what you folks may seem to be pretty straightforward information.	To ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.
Carlson-03	But I am a little bit concerned about how operations will affect, number one, the tuna fleet. I didn't notice in any of the information or the slide show that there were references to tuna. I know they'll be fishing for tuna out in this part of your designated area.	The Navy does not expect any of its activities to have a negative impact on any fishing, commercial or recreational activities, so fishing types were not differentiated. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.
		Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets.
Carlson-04	And I also want to encourage you to be very cognizant of our whale population. This is a destination area, and we have a lot of people that come out to this part of the world to do whale watching. That would have a desiccating effect on some of the operations and hotels and whatnot that use that as a money-making opportunity.	The full analysis of the proposed action and its potential impacts to marine mammals was in the Draft EIS/OEIS in Section 3.9. The conclusion of this analysis was that there would be no population-level effects on any marine mammal species.
	So three things I would recommend. Number one, I didn't mention before, but	

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	I think you should be aware that the state of Oregon is in the process of amending the Territorial Sea Plan, which incorporates some areas of what you're talking about. So I would hope you can work and inform the Governor's office, and specifically the people working, the working group that is working on the Territorial Sea Plan, so that there can be a cooperative involvement and shared information on that.	
	Secondly, hopefully, we'll have more time for folks that have gained information tonight to respond. So I would hope that you would, rather than have the March 11th date for public comment, push that out a couple more weeks at the very least.	
	And, thirdly, I recommend that you stay with the current activities. Thank you so much.	
Mills-T1	My name is Charlotte Mills. I live in Lincoln County in Tidewater, 480 Buck Creek Road.  And I read the name for the second time, like Jim, I attended the January 30th meeting in Newport and I came as an individual, then, and I come tonight as a member of a group, who after that 30 <sup>th</sup> meeting, because of the low attendance, called the newspaper and the library and found out the NEPA compliance. Did the newspaper in Oregon get notified? Did the library get a copy of the environmental statement? Did even one Oregon citizen get properly notified of that 30th meeting? They did not.  And we have contacted the congressional delegation five days in a row recently to report those incidents, and I think that is why this meeting here in Tillamook has been scheduled. Because our congressional delegation said they said – because we reported to them the Navy has not complied with NEPA, with the National Environmental Policy Act, which meant that they were to inform because they only scheduled one meeting in Oregon, at least one newspaper.  For some strange reason, they said they informed the Lincoln City News Guard and that they placed a copy of the environmental impact statement at the Driftwood Library in Lincoln city. That is a good paper and a good library, but that wasn't where the meeting was held. It was held in Newport at the Hatfield Marine Science Center. When we called the News Guard, the News Guard said, "We didn't know anything about it." Five days later after we asked the questions, they found out on their own that there was a meeting, and then they properly published that story.  When we called the library we said, "We want to read the environmental impact statement, is it available?" The librarian said, "I have no idea." So he called back later and said, "Well, it's in a box, but there is no cover letter with it saying what it is for or if it's time related." And so he called back later and said on the 13th of February, fifteen days after the 30th meeting, that it is now available for the publi	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  Further, as requested by this comment, an additional meeting was held in Tillamook, OR on February 26.  The Navy was asked in the second week of February by the Oregon Congressional Delegation to hold another meeting. By the time the Navy could coordinate a meeting location here in Tillamook, and confirm its availability, only one week remained to inform the public. The Navy agrees with the importance of notifying the public early, and in fact had done so for all previous meetings in which the schedule was planned in advance.  The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.
	going to make this in five minutes, but I'll attempt to. When I moved my comments up in front to say, we found out similar things happened because of Tillamook. I called the Antler at Tillamook, the Lighthouse, and I said,	

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	"When did you get a notice of this meeting?" She said, "It's too late for last week's edition, so we'll put it in the 25th." That was yesterday. So the people in Tillamook, at least in print media, were only informed yesterday.	
	By the way, I enjoyed this beautiful postcard I got in my mail box yesterday, the 25th, one day before this meeting that this was to happen. So when we called Sarah at the Tillamook Library we said, "Is there a copy of the environmental impact statement so people in this area can read it and see what the Navy has planned?" So the librarian said, this is bizarre, she said, "It did come in a box some time ago, I don't remember the date. The address said our Tillamook Library but it was addressed to the Newport public library, so I sent it on to the Newport library," where they now have two copies and Tillamook has none.	
	So I'm going to say at the risk and I can talk to you about the fifteen newspapers on the Oregon coast. We understood one was forty-five pages, and I'll give you the score that eight of these coastal newspapers got no notice at all; eight of them, weekly papers, got it to too late for last week; and it only was published yesterday for this meeting.	
	I'll end there. And I hope we can complete giving you the evidence why we believe this is an illegal and invalid meeting, as the 30th in Newport was.	
	Just to briefly continue what I left off with a while ago. What our group in Oregon, has Lincoln County, has recommended to our congress people is that because these two meetings have not been in compliance with NEPA mandates, that the Navy reschedule three hearings in the state of Oregon as they scheduled in the state of Washington. Why they only scheduled one originally in this state, it's unknown. But those meetings should be correctly should be correctly given timely notice and copies of the environment impact statement should be available to them in a timely way.	
	Probably one of the most disturbing things that our group found out since the last meeting was, of this \$15 million lawsuit that the Navy has settled just last December in the state of California. Not for exactly these reasons, but for similar reasons of noncompliance. That is with citizens. And the Natural Resource Defense Council had settled with the Navy, \$15 million. So we hope the Navy is not entertaining another false appearance in the state of Oregon for those reasons.	
	The last thing is, we don't hold the Navy personnel in Silverdale, Washington, altogether responsible for failing to notify the public or provide these impact statements. They hired a PR firm called Katz who has no Oregon office, they are in Seattle and California. And they have placed ads in the eight papers that did get notified only yesterday, so those ads appeared. So that PR firm obviously did not understand about the most basic Journalism 101, understand about weeklies, bi-weeklies, and daily newspaper deadlines.	
	The other thing we did bring up is about budget. Our group would like to know what the budget was for this extravagant posters, graphics, and brochures and why the ads in papers were so tiny. Then we'd like to know what the budget was for the eight-day excursion that nineteen presenters and panelists took from Oregon, Washington, and California, back again.	

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	More important, we asked at the last meeting, What does the budget the Navy proposes for this entire operation that the taxpayers and just this sort of interruption of economic chaos. We'd like those figures in about ten days. We've already prepared a freedom of information request to submit if we don't get some budget figures in ten days.	
	And, lastly, our group in Lincoln County sat around and talked about it and asked the question, If the Navy will be able to conduct activities and place installments safely and in compliance, if they'd not been able to simply notify the public of the hearing or provide copies or the environmental study. Thank you.	
	I am a member of a Lincoln County group who attended the January 30 public hearing in Newport at the Hatfield Marine Science Center. Few showed up to that hearing, only fifteen or sixteen people actually stayed for the slide show and public comments.	
	Later, our group tracked down any public notice of the 30th meeting. We found that the paper listed by the Navy to have been notified was the Lincoln City News Guard. Their editor told us that they received no notice but found out about it five days after the 30th hearing on their own. Our group then called the Lincoln City Public Library where the Navy said they'd placed the two-volume copy of the environmental impact statement. The librarian there had to look for it. He later called to say he found it in a box with no cover letter indicating it was time related. He later called to say it got cataloged and shelved on February 13, fifteen days after the Newport public hearing on January 30th.	
	Our group and others researched these issues. They contacted the Oregon Congressional Delegation in Washington D.C. asking for an extended public comment time. The Navy, then, did extend the comment time two times after receiving many citizens' contacts about the nature of what the Navy is proposing in the Northwest Range Complex plan. This hearing was then scheduled at the request of representatives of the Oregon Congressional Delegation.	
	Our group has notified the Congressional people that we hold that neither the January 30 or this February 26th hearing is valid. The Newport meeting, because the Navy failed to comply with NEPA requirements to notify the public in a timely way and because they failed to provide any library in Oregon with a copy of the environmental impact statement to review as required by federal law.	
	And we also contacted the Washington Delegates that we believe this 26th hearing is also invalid. The Tillamook Headlight-Hearld got notice late and was only able to publish notice of this meeting yesterday, on February 25th, not a timely notice. And we contacted the Tillamook Library and got this story: They received the boxed, environmental impact, two-volume statement some time ago. But although the box was addressed to Tillamook, the cover letter was addressed to the Newport Public Library. So the local librarian dutifully sent it to the Newport Public Library, which now has two copies, while the Tillamook community has no copy of the environmental impact statement to	

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	read and review what the Navy proposes to install and activities they plan to conduct off your section of the Oregon coast.	
	We understand that the Navy says it has notified forty-two papers in Oregon of this hearing. So we called all sixteen of the coastal papers located in our seven coastal counties. Here's the score: Five received no notice; eight received notice, but too late for last week's weekly editions. So eight papers published notice in yesterday's paper, the 25th, one day before this hearing. Two papers did not receive notice in time to publish on the 20th and the 24th.	
	Therefore, again, the Navy has failed to comply with the National Environmental Policy Act about informing the public of hearings in a timely way. Therefore, this hearing is not valid.	
	All this research indicates that the Navy agents in Silverdale, Washington, or their hired public affairs company, Katz, do not understand the most basic lesson learned in community colleges and university schools of journalism, that is to be well-informed about publication deadlines for weekly, bi-weekly, and daily papers. This is Journalism 101.	
	We recommended to the Congressional delegation that they require the Navy to schedule three more public hearings in Oregon perhaps at Tillamook, Newport, and Coos Bay as they provided three locations for the state of Washington when Washington has half the coastline and half the coastal population and probably half the coastal fishing, crabbing, and seafood industries, as well as recreational businesses to be impacted by the Navy's proposed activities. We recommended for the Navy to correct and revise its environmental impact statement because our readers found old science in most references.	
	We recommended that they hire independent marine scientists to revise the environmental impact statement rather than rehire the authors of the current statement, who were hired on assignment to show the Navy's plans to be safe and in compliance with federal law.	
	Something we haven't yet recommended to the Congressional people is to have the Navy provide them and our Oregon group with budget figures. Budget for the extravagant giant posters, graphics, and brochures, and postcards; budget for the Navy' eight-day excursion from Washington to Oregon and California on their first public hearing trip for travel, lodging, and meals. Most important, what the Navy's budget is for the proposed installations and activities they have planned for the Northwest Range Complex here on the Washington, Oregon, and California coastline.	
	We need those budget figures in ten days. If not received, we have prepared a Freedom of Information request to be submitted so the citizens of Washington, Oregon, and California can learn what the Navy's plan will cost. Thank you.	
	Survey of Oregon's sixteen coastal newspapers re February 26 public hearing in Tillamook, Oregon. Score:	
	Five received no notice, eight received notice late, two ran on the 20th and 24th.	

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	Astoria Daily Astorian. Notice arrived on February 24, so it appeared on page	
	3 that day because this paper is a daily. Public got a two-day notice.	
	Bandon Western World editor said they received no ad nor news release.	
	Brookings Curry Coastal Pilot editor received an earlier story from their Washington D.C. news service, WestCom, which ran on February 18, but it was on the March 11 extension for public comment. No ad and no notice on February 26 hearing.	
	Coos Bay World editor said they got notice too late for their weekly deadline, February 18, so notice ran on February 25, one day before the 26th hearing.	
	Coquille Sentinel is located twenty miles from coast but has readership in that coastal area. Our group gave the name and location of this paper to Silverdale staff on their request weeks ago. No ad and no notice.	
	Florence Siuslaw News received sometime the week of February 16 or 23rd, but did not get published in either of their bi-weekly editions of Wednesday and Saturday. Staff not sure of receiving an ad when we called.	
	Gold Beach Curry County Reporter did receive a notice too late for their weekly edition of the 18th. Did publish notice on 25th, one day prior to 26th hearing.	
	Lincoln City News Guard did receive notice too late for their Wednesday edition, February 18, did publish on 25th, one day before 26th hearing.	
	Newport News Times did receive notice in time for their Friday edition on February 20 so readers could have read of hearing six days before the 26th hearing. Newport is 100 miles from Tillamook and has little readership there, only in the library, perhaps.	
	Port Orford News editor reports receiving no ad or notice. Says he is ex-Navy vet and would like for Navy to put this paper on its print media list.	
	Reedsport Umpqua Post. Tried three times to contact this paper. Was unable to have answering service at office to ever answer.	
	Rogue River Press received no ad and no notice.	
	Seaside Sun received an ad notice on 20th, ran ad on 26th, one day before the 26th hearing. It was placed by the public relations company, Katz. Editor did not say a story was notified or run.	
	Tillamook Headlight-Herald received notice too late for their February 18th edition. Notice story ran in 25th edition, one day before the 26th hearing. Contact could find no ad was sent or published.	
	Warrenton Columbia Press, located only sixty miles from Tillamook, but received no ad or notice.	
	South Lincoln County News received notice too late for 18th edition. Ran ad and notice in their 25th edition, one day before the 26th hearing.	
	Special report on how the environmental impact statement meant for Tillamook library was handled. Tillamook librarian, Sarah Beeler, explained that the two-volume EIS did arrive at the Tillamook Library some time ago. When she examined the container box and correspondence, she discovered that the cover letter was addressed to the Newport Public Library but the	

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	address on the box and letter showed the address for the Tillamook Public Library. Consequently, Beeler forwarded the box and correspondence on to the Newport Public Library.	
	A call to the Newport Public Library today, 2/26/09, indicated that this library received a two-volume copy of the EIS some time ago and then received a second EIS just a few days ago. So the Newport Public library now has two copies and the Tillamook Public Library has no copy for public review. That means the Tillamook community, where the 26th hearing is taking place, has had no opportunity to examine or review the EIS.	
	Newport librarian reports the first copy is available at the reference desk, can be used but not taken out. The second EIS is being cataloged and shelved as soon as possible. The librarian is eager to know if they should send the second copy back to the Tillamook Library.	
	It appears that either the Silverdale Navy staff or their public affairs agency, Katz, failed to provide the Tillamook Library or that community with the EIS as it is believed they were required to do according to NEPA requirements.	
	This compounds the problem with the Navy's failure to notify the sixteen Oregon coastal newspapers in a timely way. Five received no notice. Nine received notice too late for their weekly deadline during the week of February 16. Two papers, the Astoria Daily Astorian and the Newport News Times, received notice in time for the Astorian's 24th edition and the News Times' Friday the 20th edition. Reedsport Post responded to no calls.	
	Consequently, eight of the nine coastal papers did publish the notice in their 25th editions. The Florence Siuslaw News evidently received the notice too late for their Wednesday or Friday papers during the week of the 16th, received notice sometime during the week of the 23rd, but failed to run the story in their 25th edition.	
Peake-01	My name is Darus Peake, D-a-r-u-s P-e-a-k-e. Thank you for inviting us. We appreciate it.  My name is Darus Peake. I'm an attorney with the Oregon Salmon Commission and the Oregon Albacore Commission, an industry-funded state commodity. We represent approximately 1,400 vessels or 1,400 small businesses. Salmon and tuna are two of the most valuable fish on the Oregon coast and also the most sound and temperature sensitive. Fishermen will tell you that any sound created by a vessel will kill any biting and also drives fish from the area. We're talking about sounds caused by vibrations or other sounds generated by the boat.	The Navy does not expect any of its activities to have a negative impact on any fishing, commercial or recreational activities, so fishing types were not differentiated. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with
	In the past years we've used legal seal bombs that have been used offshore to keep the sea lions away from the vessel. You seal the bomb and detonate it in the water, it drove the fish from the area.	representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
	Our fish are also temperature sensitive, and will change the migratory pattern to follow such temperatures. We look at the internet and see where to change our fishing to follow for the ocean heat patterns. If the Navy has that area closed and the fish are migrating through that area, we will lose parts of our really short season. We only have a few days for our fishing season. Salmon	

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	is now counted in days. The Navy testing could have a serious effect on the economy, and we're worried about it.	
	Right now, after these meetings today, we found out that with no mortality rate being minimal, we can't condone this relationship. Thank you.	
Goche-01	I'm a commercial fisherman, my name is Rick Goche, G-o-c-h-e. I'm a sheriff of the Oregon Outdoor Commission and I'm a member of the Southern Oregon Ocean Resource Council that is involved in the Territorial Sea Plan. The Oregon Outdoor Commission is charged with allocating for albacore, and those families and businesses that depend on them, the albacore.  As Darus mentioned, albacore and tuna are really sensitive to noise. I actually have an acoustic specialist come to my boat every year and test it to make sure it's not putting off noise that the albacore will be driven away from the boat by. Even a small noise, like he said, can shut off the bite.  So one of the one of the hopes that we would have is that if you are going to introduce surface or subsurface detonations, that you, in effect, fire a warning shot so that the area will clear itself from fish and sea life and that will help. Some of the concerns that we have are the size of the operation of the area. The area of operation, if it's a very large area, that – that we're going to ask that it be excluded. Like Darus said, the wrong time or place it can have a devastating impact on our economy and the families, et cetera. The length of time of the operation is also a concern.  And the lead time that we get – get notification of the area. Many times we might be in rough weather that you guys can operate in, but we're shut down, we're dead in the water. We can't pick up and drive away, it's too dangerous, we can sink our boats. So that needs to be considered, too. If the operation comes into the area and we can't move, sorry.	The Navy does not expect any of its activities to have a negative impact on any fishing, commercial or recreational activities, so fishing types were not differentiated. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
Goche-02	We're also concerned about any intended use of the depleted uranium with the munitions being used in the area and the potential for impact on our livelihoods.  I also wanted to echo Ms. Buell's comments regarding coordinating with the different fisheries. Every fishery has representation, like I represent the albacore fishery, Darus represents the salmon fishery. Each fishery has someone representing it that you that you can interface with so you can know what is going to be happening in that area. We appreciate that cooperation.  So I don't have any illusions that the Oregon Albacore Fishery is going to boss the Navy around, but I would like you to consider the no-action option. I think that would be best for our fishery. Thank you.	Depleted uranium (DU) use is no longer part of the proposed action for this EIS/OEIS. None of the surface combatant ships stationed in the Pacific Northwest, which are the ships that conduct the preponderance of training at sea in the Pacific Northwest, have DU onboard. Subsequent to public release of the Draft EIS/OEIS, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. This change is reflected in the Final EIS/OEIS in Section 3.3.1.1.7.
Bohannon-01	Good evening. I'm kind of a semi-retired fisherman, but I've been a vessel owner and captain since 1962. I've fished on every ocean on the planet except for the Indian Ocean. I spent most of my time in the Bearing Sea, a lot of it off the West Coast, fished for almost all the fisheries, so I have some experience. And the one thing I'm concerned about is the whiting fish, one of the fisheries I helped pioneered in the late '70s.	The activities of the proposed action take place in the same area and at approximately the same level as they have for decades. The fishing industry can expect no noticeable change in their level of interaction with the Navy in the NWTRC.  There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range

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	Your area of operation takes up an awful lot of this coast, and I didn't think you realize that the whiting fishery starts in the spring somewhere around	complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other
	Fort Bragg, California and that's 40 North, 41 North, I don't have a chart with me and goes clear to Cape Flattery, which is 48; from 25 fathoms, and	vessel traffic for conducting their training.
	that could be anywhere from two to ten miles off the coast, out to 400 fathoms.	Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with
	And there is what that fleet includes is thirty-seven boats, 85 to 100 long, 150 long delivering to short plants. Another that is fifteen short plants from Eureka, Crescent City, Coos Bay, Newport, Columbia Ridge, and Westport. And it's twenty-four fishing vessels, same size, 85 to 150 feet delivering to the processers, the mother ship. There is five mother ships, they're 250 to 630 feet long. There is ten different processers, and they're 250 to 350. It's a total of ninety-one vessels with approximately 1,700 personnel aboard. The shore plants have another 1,500 people. These are all people in the coastal communities.	representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
	Most of the time the fishing is spread out and each individual fleet is working – working together but spread out. There are other times that the fish are concentrated in one area and most of the fleet is on that spot. When fishing, each individual fishing boat, whatever the size, has three times the depth of water they're fishing in and the amount of cable they have on them. They also have a net that measures about 100,000 feet. That translates, related here, to a value of up to one million bucks. This isn't just a part-time deal, it's a year-around operation. It is high end and costs a lot of money.	
	If you take a look at the diagram, we're operating vessels that are spread over a mile long, there is lots of fish. But they've got a mile here, and some of that gearing is worth a million bucks. And, of course, the vessel is worth quite a bit more. So it's pretty important fishing.	
	We took 270,000 tons of that fish last year, and the value of that was \$60 million. When you put the add the value to the process it was 250 million, and when you put the coastal multiplier on, and it's somewhere four to five billion dollars of value to this community.	
	The fishery is sensitive to loud detonations. I have personal experience. When we had oil exploration down here in the '60s, a lot of people claimed a lot of things were or weren't happening, but one thing is for sure, that detonation happened and that scattered the fish. I don't know how much it killed, I'm not here to talk about that. What it does do is spread that fish out and all of a sudden you've got a fleet that costs a lot of money to operate or having to go somewhere else.	
	I've got this written up if it will help. I'm not here to stop you, we need you, obviously. I'm a good American, love the Navy, but I think you've got to get a liaison to work with this fleet during the summertime, and not be doing this like you did the Santa Barbara channel and not being able to transit it. To use the vessels, you can't do it in a small lane. We cover a lot of space. There is other fish that I'm concerned about, too. I think that is the main one, and one of the most valuable in this coast, and something you should consider.	
Parks-01	Well, this is kind of new for me. But this is really important, I think. And as	The Navy does not expect any of its activities to have a negative impact
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	quite a few of the people have said before, our lifestyle and livelihoods are very, very fragile. And I can't see how this won't impact incredibly a lot. And I implore you to take the no-action. And I understand that it's twelve miles out from the shore, and that's pretty close. And I gather that at this time most of the sonar is happening in California, and I would like to ask that that continue in California and our fish and sea life up here hopefully won't be impacted any more than they have been.  So I ask that you also consider our we're trying the Oregon Energy Camp plant out here, and please take that into consideration. That is very, very important for Oregon right now. And take the no-action plan, please. Thank you very much.	on any fishing, commercial or recreational activities, so fishing types were not differentiated. There are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.  Two possible exceptions to this involve the proposed mine training range and the portable undersea tracking range. Before locations are determined for these range enhancements, the Navy will coordinate with representatives from the fishing fleets. The description of these two range enhancements was in the Draft EIS/OEIS in Sections 2.6.2.2 and 2.6.2.5. The analysis of the potential impacts to fishing was in Section 3.14.2.
Mate-T1	Good evening, Commander King, Captain David, Mr. Mosher.  Thank you for returning to Oregon. We appreciate you being here and the serious nature of your business, all of us, and keeping us safe. And I want to assure you that we're very grateful for your honest opinion and paying attention to the environmental aspects of what you're doing.  I'm here as a private citizen today, but I have some credentials. I've been studying marine mammals here in Oregon for forty years. I direct the Oregon State University Marine Mammal Institute. I'm going to make a number of comments quickly and I'll be a little erratic. The 165 decimal level is the level at which the National Fisheries Service determines that about half the individuals will have a behavioral reaction and will have a detriment. Your signals are set at 235, seventy decimals above that. And, of course, we know that this is a long distance scale and we know that the animals are going to be right on top of this source.  It sounds like the 165 level most generally should be out there about two kilometers away. So some of the mediation that you have in place will be very helpful and others you may need a little more attention to, perhaps.  I'll make some specific suggestions. As I came tonight, I wondered why anybody might have predicted the impact on the harbor seal and the matter of similar impacts on shallow-water species which are harbor porpoises and sea lions. I must admit that the model is a bit daunting, even for me. And I	Of more significance than the 165 dB level, the mitigation measures used by the Navy, including a 1,000-yd safety zone, are calculated to mitigate potential physiological effects to marine mammals, which can occur at received levels as low as 195 dB. This 195 dB received level would occur well within the 1,000 yard safety zone.
Mate-T2	can't imagine some of the other people struggling with it.  What I learned this evening, actually, you use the randomizing process sort of sandwiched through the entire operation area, sort of a mathematical model to spread around where the operation may be at different times and places. And that in most cases you also considered marine mammals in the area. This is, of course, not a realistic aspect how your operations work with marine mammals. They are, in fact, sometimes passing your ships in time and space because of migrations. Your operations also are not uniform nor equally spread out, so I'd also have you give us the details that are blind to us, a realistic expectation of where you're going to do these things, and have you work through that model and give us a more realistic appraisal of what you think the impact is going to be, rather than give us something that we	The unknowns and related assumptions applied in the modeling process are described in Appendix D of the Draft EIS/OEIS in Section D.7.

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	know is going to be strongly off balanced in character.	
Mate-T3	With regard to the detonations, we see fourteen animals may have a 50 percent tympanic membrane rupture. This is likely going to dramatically affect their ability to feed and forage effectively, if not their sounds and predators. Not that fourteen animals is a large number but I think we ought to be forthright in the EIS about communications and consider the effects. I think there are other areas in which Level A impacts may occur. I think we ought to make some of those observations as well.	These 14 exposures are due to explosive detonations during Navy proposed activities as provided in Table 3.9-11 of the Draft EIS/OEIS. However, these are the results of the acoustic modeling without consideration of the Navy's mitigation measures. Because crews conduct visual reconnaissance of any target area before firing or detonating any explosives, the Navy is confident that actual injuries will be greatly reduced if not completely eliminated.
Mate-T4	When the table summarizes all this information and says "may effect," what does that really mean? I suspect there is no significant impact in population levels actually, but is it likely that that doesn't mean it won't cost the individuals. And I think what we're looking at here is the baseline for the first time. We're looking at honestly trying to figure out what happens when you do the operations which you've been doing for a number of years. Even the Level 2 assessments you have here, the sonar operations will not change dramatically.	The term "may affect" is used to indicate that the Navy's activities may have an effect on a particular endangered species and the Navy will consult with the National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service, as appropriate, on that particular species in accordance with the Endangered Species Act.
Mate- T5	What we'd like to know, both historically, and when your operations are been going on, so we can look at correlations of things like stranding events, beached whales. We would also like to know a close period of time, if you can't tell us ahead of time, when you'll operate. We'd like to know as a scientific community and interested public when you're doing operations and when you've completed those so we can look at correlations and other events. Mind you, we know they're not cause and effect relationships, necessarily. This is the way science approaches the issue of what may or may not have effects on the wildlife.	Section 5 of the Draft EIS/OEIS is a discussion of conservation measures, which includes monitoring of marine species in the NWTRC.  The Navy does keep record of active sonar use for exactly the reason stated in the comment—to establish or rule out correlation with sonar and unusual marine mammal events.
Mate-T6	With regard to detonation, I'd suggest that you spend a little more time looking at the area to ensure it's clear and that you actually spend some dedicated time on the active follow-up to see if animals appear in the area and particularly if their behavior is abnormal. It's those kind of recap assessments that are going to be important to us. I'd like you to think seriously about this five-year authorization period of coming back with another EIS that provides us with an analysis of what you've expended effort and what you've seen particularly, to share with the public, and have a better understanding of how you operations affect offshore issues.  When you have a chance, I hope you will possibly develop your technical protocols and training in areas where they have the least amount of impact. I recognize what you're doing is extremely important. Thank you.	The mitigation measures used by the Navy have been developed in cooperation with NMFS. The Navy's monitoring plan includes requirements to monitor an area following the training activity.
Mate-T7	I'll make this quite brief. Bruce Mate, again.  I noticed that under one of the tables 3.9-113 in the last paragraph it said: Alternative to 390 hours mostly new, high-frequency active sonar, not in the no-action, no Alternative 1 categories. So then it says: The high frequency and mid-frequency emissions were not included in the sonar modeling. So potential mammal exposures to these sources were not investigated. I can't think of a good reason why you wouldn't have estimated those in the	The systems described in this comment have much lower power levels and higher frequencies than those of the systems that were included in the acoustic modeling. They were analyzed for potential effects however, based on their parameters and level of use in the proposed action. As described on p. 3.9-113, the systems were determined to be unlikely to affect any marine mammals.

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	appropriate places. So I think that is something that deserves attention in the final EIS.	
Mate-T8	And then, finally, for the offshore areas in the EIS, page 3.9.55, it says: For offshore areas, predicted species habitat models were built with sufficient numbers of sightings to estimate densities in the study area. Which means it took into account the more abundant animals. A lot of the animals that are ESA listed or for which you have non-sufficient information, are some of the ones of greatest concern in some of the areas. These include beak whale species, false killer whales, animals that we don't know very much about. For those, I guess, I'd like you to probably make a little more effort. I understand you worked closely with the National Fisheries Service gathering available information. But because some of these species tend to be a little more sensitive on the sonar issues, they'll probably be perhaps wind up	The best density information available was used for the modeling analysis.
Lavheis-01	I'm a scientist as well from Portland, Oregon, and I only found out about this a few days ago. I study vocalizations and acoustic communications in mice. So I just want to bring up a few things that concern me a little bit. I certainly realize the importance of the work that you do, especially now with the two wars. But I think there are a couple things we should do with regard to the sonar. The level of sonar, the sound will be, what I understand, will be at 140 decibels at about fifty-one to 130 kilometers out, that is about eighty miles. Eighty miles out, there is going to be a constant sound of about 140 decibels. The reason I think that is important, is that if you look in your EIS in another place, you've got a very nice done a very nice job of the source level of sound coming from different species of marine mammals. And at the source when the sound is the loudest and they're emitting their vocalizations, their communication for collecting food, et cetera, this is about the same decibel. The way I read it here, we're talking for eighty miles in any direction, which is a lot more than twelve miles off the coast. This is a substantial amount of area. You're essentially flooding this area with constant sonar sound that is going to essentially wipe out communication between the species for an extended period of time: five, six, seven hundred hours, the time the sonar is going on in a given year.  Again, I've only had a few hours to look at this environment impact statement because I just found out about this meeting. The concern is really simply that when humans interact, when we communicate, we're used to hearing sounds go up and down, and we're very sensitive to the frequency at which we talk. If we were always being blasted, essentially, at levels equivalent to shouting at each other for several hours, I can't imagine that that would not have some pretty substantial impact on marine mammals. And I have no idea about fish. I think it's a valid question. I don't see anything addressed in this EIS about h	The comment makes several generalizations that should be clarified here. First, the table showing the 140 dB out to 51 – 130 kilometers (Table 3.9-3 of the Draft EIS/OEIS) refers to the range of sonar from the SQS-53C sonar, the most powerful sonar used in the NWTRC. This sonar accounts for only 43 hours per year at most in the NWTRC. This is significantly less than the "five, six, seven hundred hours" mentioned in the comment. The remaining sonars in use are no more than 1/10 the power level of the SQS-53C sonar. Many operate at much higher frequencies, which attenuates more quickly than the mid-frequency example in the table. Second, the distance of 51 to 130 km referred to in the comment is for a range of received levels below 140 dB. Received levels in the range of 140 to 150 dB would extend to a maximum of 51 km, about 32 miles at most.  Finally, it is important to reference 140 dB with other underwater sounds. At the source, a humpback whale song ranges in power from 144 to 174 dB. At 183 to 192 dB, the fluke and flipper slap of a humpback whale would be 10,000 times louder than the 140 db. Snapping shrimp range in signal strength from 183 to 189 dB. A single lightning strike on the water's surface can enter the water at approximately 260 dB.  Taken together, the 140 dB is not as significant a receive level as the comment infers, the range is significantly less than 80 miles, and this level of sound applies only to a small fraction of the total sonar hours in the proposed action.

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	I know as a scientist that there is a lot more that we don't know than we do know. I think one thing we do is try to make the best judgment with the little bit of information we have. I think there is a fair amount here that we really don't know about what is going on. I think if we do this, there is a potential to disrupt things a lot more than what we think. So as much as I respect what the Navy is doing, I think that the no alternative to would be ideal because mostly because this would be a lot more disruption. I think scientists could adequately predict what would happen. Thank you very much, and thanks for listening.	
Goddard-01	Good evening. Thank you for giving us this opportunity to speak to you and let us know let you know what is on our minds. I represent a group from Depot Bay, the Depot Bay Near Shore Action Team. And we have recently finished conducting a number of public outreach meetings regarding a relatively small marine preserve proposal, a mere 731 acres. The public outreach that we did for that marine preserve, just the small city of Depot Bay, a couple thousand people, constituted four different public outreach meetings. I find it pretty amazing that the Navy schedules six public outreach meetings for something of this scope. And my feeling is that that is woefully inadequate.  I've further had concerns given the nature of how the notification was handled regarding the meetings, that there may be a correlation between notice of these public outreach meetings and any notice of any information that may impact us. Thank you.	The Navy's notification efforts exceeded the requirements of NEPA (40 CFR §1506.6). Please see Appendix F for a complete listing of notification efforts to publicize the public meetings.  However, to ensure the public had ample opportunity to comment, the comment deadline was extended from February 11 to April 13. This increased the original 45-day comment period to 105 days. Public comment was not limited at any time during the comment period because comments could be submitted by mail postmarked no later than the closing date.  The Navy will continue to review the means by which it can most effectively and efficiently provide proper notification of future events.
Robison-01	My name is name is Lars Robison I have a charter boat company in Depot Bay, Oregon, and we are involved in every fishery we can be from the tuna offshore to the halibut. And, as well, I make probably over 50 percent of my business comes from whale watching, watching gray whales, orca whales, and on some great days, the humpback whales. And, of course, my concerns are for my company as well as the rest of the Depot Bay fleet, that we not be financially impacted by these Navy exercises out here. We have, of course, tuna fishing, halibut, salmon, rock fish, albacore. So I'd like to have the Navy be in touch with the Oregon Department of Fish and Wildlife and some of other local groups, Depot Bay Near Shore Action Team group, a fine committee out of Newport, Oregon. And we do have quite a few of them. The Fact Group, which is another coastal fisheries group, the Very Concerned Citizens of Tillamook County, they are all people in the mix, and be notified when you are doing these exercises.  And also these groups are available to help you guys avoid impacts on the economics of the fishermen out here in the coastal waters as our tuna fish is generally from twelve miles out to, say, fifty to sixty miles. And, also, I'd probably I'm not a member of the Salty Dog Team here. But I know that there is a group a website, ifish.net which has a tremendous amount of sport fishermen, and the saltwater component of that is the Salty Dogs. They have quite a website or a blog that they readily give out information to each other, it's quite a site and there is a I'm sure there will be a lot of comments on that as well.	Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.  Of primary importance, there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS FINAL (SEPTEMBER 2010)

ID	Issue Text	Response Text
	We'd like to help the Navy in any way we can to avoid impacts on fishing in this area. And we're available the Depot Bay Near Shore Action Team is available all the time under the auspices of the Depot Bay City Council in Depot Bay, Oregon. That is it.	
	I'm worried about the impacts as well as the delayed impacts. That is all I have. Thank you.	
Thompson-T1	Thanks for coming back to the Oregon coast. I addressed most of you in Newport and my comments were aimed at the safety issues that existed between submarine vessels and the offshore trawling industry.  There have been several contacts over the years. I've had a chance to do some research into and I haven't been able to find that information. I'll try to in the future get information and pass it to one of you, from the insurance companies. There is no evidence that it was a U.S. Navy vessel, but there is evidence that these vessels had made contact with submarines.  So in order to make this short, I tried to think about how we could minimize the potential conflicts that have existed in the past. And by doing that, I think by and you heard other fishing organizations say that they're ready and willing to help you. After thinking about it for a while, it seems that Sea Grants around the United States has a pretty good knowledge of every fishery around the coastal United States. Seems that would be the natural contact point since Sea Grants is a federally managed organization.  Here on this coast, we have Heath Hildebrand which coordinates all of our commodity fishing and all the different fishing groups and is quite familiar with all the action committees. That would be the logical point of contact if somebody was to contact them to take this information, to learn about the fleet.  Then I think you need to come together, with probably Scott McClennen for Undersea Cable, Brad Metzger from the trawlers organization, David Jenkins from Midwater Trawlers, maybe myself, to actually convene a meeting with a representative from the Navy to try to understand what we're doing. It's this understanding, this communication, which will minimize the potential damage to our vessels and conflicts with your operations. My comment is, that is how I would go about trying to solve a potential safety problem here. I don't think we require a lot of time on the Navy's part, but some development of coordination might help. Our indust	Thank you for the information regarding points of contact for the fishing industry.  Thanks to your comment and numerous similar comments, the Navy is very aware of concerns from the fishing industry and fishing fleets in the Pacific Northwest.  The Proposed Action includes increases in the number of certain activities while ships are at sea, but does not necessarily correspond to an increase in at-sea time for the ships. Therefore the level of Navy surface ship activity proposed is not significantly different from the level of activity over the past several decades.  Of primary importance, there are no restricted areas in the NWTRC. Normal right of way for fishing boats and all other vessels is honored throughout the range complex. In fact, to prevent interference during the conduct of their activities, Navy ships and aircraft intentionally seek areas clear of all other vessel traffic for conducting their training.