

# Section 1

## Introduction

The San Juan Creek Watershed is a 176-square mile catchment area which contains San Juan, Trabuco, and Oso Creeks. The lower reaches of San Juan and Trabuco Creeks have been degraded, while the upper reaches of San Juan and Trabuco Creeks and their tributaries remain fairly in tact. San Juan, Trabuco, nearby San Mateo, and San Onofre Creeks all had consistent steelhead runs up until at least the late 1940's (Hubb, 1946). The decline in steelhead is a result of: agriculture, mining, urban development, migration barriers such as the Trabuco Creek at I-5 culvert, degraded stream habitat, decreased stream flow (e.g., withdrawals), and degraded water quality. California Southern Steelhead (*Oncorhynchus mykiss*) were listed as an endangered species on August 18, 1997; the southern range was extended to the US/Mexico border on May 1, 2002, and endangered status was reaffirmed on January 5, 2006.



*Holy Jim Canyon, 1950's. Photo courtesy of California Department of Fish and Game*

### 1.1 Vision and Goals

The vision of the San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan is a restored watershed supporting steelhead populations in a sustainable manner. To this end, the overall goal of this Plan is to preserve, protect, and restore the natural habitat and water quality of the ecosystems for the benefit of steelhead trout and other native species, and public use including water supply, flood control, recreation, and aesthetics. Restoration of the watershed and steelhead population can be accomplished through the following actions using a watershed scale approach: Preserve intact upstream habitats, restore fish passages, restore natural hydrology and sediment transport, reduce water pollution (source control, treatment), and restore degraded riparian and aquatic habitat in the lower reaches.

More specifically, this Plan addresses the following watershed-wide goals as they support the overall vision for steelhead recovery in the San Juan and Trabuco Creeks Watershed:

- To protect and restore habitat;
- To restore Steelhead access to spawning and rearing habitat;
- To restore adequate water flows;

- To improve water quality;
- To improve freshwater and marine survival; and
- To educate the public about Steelhead and the importance of caring for its habitat.

The San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan is being prepared consistent with California Department of Fish and Game (CDFG) California Salmonid Stream Habitat Restoration Manual protocols for watershed assessment. Public input was sought in order to document existing watershed conditions in the San Juan and Trabuco Creek hydrologic unit, to identify limiting factors to Steelhead recovery, and to provide prioritized solutions to eliminate limiting factors to Steelhead recovery.



*San Juan Creek above Pacific Coast Highway, September 2002. Photo courtesy of George Sutherland. Trout Unlimited. South Coast Chapter.*

## 1.2 Purpose and Need for a Steelhead Recovery San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan

The purpose of this Plan is to develop a San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan for the San Juan Creek and Arroyo Trabuco Creek drainages in Orange County, California that will emphasize the needs of the **Southern California Steelhead Trout** (*Oncorhynchus mykiss*), a federally-listed endangered species found along the coast of southern California. The specific needs that will be addressed are the improvement of poor habitat conditions and the removal of existing obstructions that currently prohibit steelhead migration.



*Rainbow Trout in Upper Trabuco Creek, September 2002. Photo courtesy of George Sutherland, Trout Unlimited, South Coast Chapter.*

The primary objective of this Plan is to document existing watershed conditions, identify limiting factors to steelhead recovery, and to provide prioritized solutions to eliminate or mitigate limiting factors.

### 1.3 Project Area

The project area includes the entire San Juan Creek and Arroyo Trabuco Creek drainages. Refer to Figure 4-1, Survey Reach Locations. The approximate center of the project is in Township 78, Range 7W, Section 22 of Canada Gobernadora 7.5 Minute U.S. Geological Survey (USGS) Quadrangle, at N33.32 55.3 latitude and W117 35.30 longitude.

### 1.4 Report Format



*Mouth of San Juan Creek, Dana Point, California, March 2003. Photo courtesy of George Sutherland, Trout Unlimited, South Coast Chapter.*

This report is organized into eight (8) sections as described below:

**Section 1: Introduction** – This section states the vision and goals of this Plan, and discusses the purpose and need for a Steelhead Recovery San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan.

**Section 2: Stakeholder Outreach** – Stakeholder input and feedback helped to facilitate the creation of this Plan. This

section summarizes the public meetings held in 2006 and 2007.

**Section 3: San Juan Creek Watershed Conditions** – This section provides a description of the physical characteristics of the watershed and significant watershed features and programs. The needs of the **Southern California Steelhead Trout** (*Oncorhynchus mykiss irideus*), a federally-listed endangered species found along the south coast of Southern California is also included in this section.

**Section 4: Field Investigations** – This section provides the results of the Spring and Fall 2006 field surveys.

**Section 5: Restoration Projects** - This section describes potential projects in the San Juan Creek Watershed which aimed at restoring steelhead habitat, improving water quality, water resources, and ecosystem health, and promoting Steelhead recovery efforts.

**Section 6: Recommended Projects** - All projects identified in Section 4 are important to reestablishment of steelhead in the San Juan watershed; however, some are more



*20-inch Steelhead Trout in Dana Point Harbor, Dana Point, California, December 2002. Photo courtesy of George Sutherland, Trout Unlimited, South Coast Chapter.*

critical than others. Critical projects are those that remove migration barriers to spawning grounds in the headwaters. Other projects that do not address barriers are less critical. Finally, cost has not been considered a factor in prioritizing projects. Section 6 includes a description of the suggested order in which projects should be undertaken. Prioritization will be re-evaluated pending agency and stakeholder input.

**Section 7: Funding Mechanisms for Implementation** – This section includes descriptions of Federal, State, and local funding opportunities that are either currently being used to fund projects in this Plan or should be pursued to secure future funding for projects in this Plan and beyond.

**Section 8: References** – This section includes a complete list of references used in the preparation of the Plan.

**Section 9: Preparers and Contributors** – This section includes a list of document preparers and those who contributed to the Plan development process.

## 1.5 NOAA Steelhead Recovery Process

The Endangered Species Act (ESA) grants NOAA's National Marine Fisheries Service (NMFS) the authority to develop and implement recovery plans for threatened and endangered species. NMFS is in the process of developing recovery plans for four distinct recovery domains in California. The target dates for publishing the Recovery Plans is early 2008. NMFS recovery planning is a two-phased process involving scientific inquiry (Phase I) and public involvement (Phase II).

Phase I is expected to be complete in spring 2007. The results of this phase are presented in 2 technical memoranda: Steelhead Population Characterization for Recovery Planning (October 2006) and Viability Criteria for Steelhead Populations and ESUs of Southern and South-Central CA (2007 Draft).

Phase II was initiated in 2006; NMFS plans to hold a series of workshops designed to gain stakeholder input on some of the key features of the Recovery Plans. A series of three workshops will be held in four locations throughout the geographic range of the Planning Domain. The series will include workshops focusing on the Technical Recovery Team scientific products/threats assessment, recovery actions, and draft Recovery Plans.

The San Juan Creek Watershed is within the NMFS South-Central/Southern California Coast domain. Phase II threats assessments workshops were held on: April 4-5 in Ventura, April 12-13 in Carlsbad, April 18-19 in Arroyo Grande, and April 25-26 in Carmel. Recovery planning and development of recovery actions workshops were held on: June 1 in Carlsbad, June 4 in San Luis Obispo, and June 13 in Carmel. The final set of workshops will focus on NOAA's draft Recovery Plan and are expected to occur when the draft plan is released in 2008.

## 1.6 Other Related Documents

Documents incorporated by reference into the San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan include the following:

- NOAA. Viability Criteria for Steelhead of South-Central and Southern California Coast. July 2007.
- NOAA. Steelhead Population Characterization of the South-Central/Southern California Steelhead Recovery Domain. October 2006.
- County of Orange. Rancho Mission Viejo Final Environmental Impact Report No. 589. November 2004.
- U.S. Army Corps of Engineers. Draft Environmental Impact Statement, San Juan Creek and Western San Mateo Creek Watershed, Special Area Management Plan (SAMP). Volumes I, II, and III. November 2005.
- U.S. Army Corps of Engineers. San Juan Creek Watershed Management Plan. September 2002.
- U.S. Army Corps of Engineers. Draft San Juan Creek Watershed Management Plan, Alternatives Analysis Report. May 2002.

A full list of references consulted during the preparation of this Plan is provided in Section 7. The NOAA document has been included in its entirety in Appendix C.

## 1.7 Agency and Organization Contacts

For more information on Steelhead recovery efforts in the San Juan and Trabuco Creeks Watershed, please contact:

### **Mary Larson**

Senior Fishery Biologist Specialist  
California Department of Fish and Game  
Fishery Restoration Grants Program  
4665 Lampson Ave, Ste C  
Los Alamitos, California 90720  
tel: 562-342-7186  
fax: 562-342-7153  
mlarson@dfg.ca.gov

### **George Sutherland**

Lead Project Proponent  
Trout Unlimited, South Coast Chapter  
2251 Avenida Salvador  
San Clemente, California 92672  
(949) 361-0274  
gsland@cox.net

### **Stan Glowacki**

Fisheries Biologist  
National Oceanic Atmospheric Administration  
National Marine Fisheries Service, Southwest  
Region  
501 W. Ocean Blvd. Ste 4200  
Long Beach, California 90802-4213  
Tel: 562-980-4061  
Fax: 562-980-4027  
Stan.Glowacki@noaa.gov

### **Wendy Katagi**

Project Director  
Camp Dresser & McKee, Inc.  
523 West Sixth Street, Suite 400  
Los Angeles, California 90014  
(213) 457-2200  
Katagiwr@cdm.com

THIS PAGE INTENTIONALLY LEFT BLANK