

# CLEAR CHOICES, CLEAN WATERS

THE LEGGATT INQUIRY  
INTO SALMON FARMING  
IN BRITISH COLUMBIA

*Report and Recommendations*

THE HONOURABLE STUART M. LEGGATT

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*“The salmon farming industry has been allowed to develop until it has become clearly out of balance with British Columbia’s natural environment.”*

THE HONOURABLE STUART LEGGATT, NOVEMBER 2001

*“The Department (of Fisheries and Oceans) is not fully meeting its legislative obligations under the Fisheries Act to protect wild Pacific salmon stocks and habitat from the effects of salmon farming.”*

REPORT OF THE AUDITOR GENERAL OF CANADA, FEBRUARY 2001

*“The (Senate) Committee recommends that DFO define the ‘precautionary approach’ as it pertains to aquaculture, and issue a written public statement on how the precautionary approach is being applied to the aquaculture sector.”*

REPORT OF THE STANDING SENATE COMMITTEE ON FISHERIES,  
JUNE 2001

CLEAR  
CHOICES,  
CLEAN  
WATERS



STATEMENT FROM  
INQUIRY COMMISSIONER STUART LEGGATT

This inquiry was a unique and interesting experience and, I hope, a useful exercise in democracy. The inquiry was independent. I designed the terms of reference and was not limited in any way with respect to these findings.

We held four days of hearings in Tofino, Port Hardy, Alert Bay and Campbell River, areas where most of the salmon farms are located in British Columbia. We concluded with four days of hearings in Vancouver.

Our inquiry had some significant limitations. Not being a government-mandated inquiry we lacked the power of subpoena and with a limited budget and time frame we did our best to canvass this issue.

Hopefully this report can shed some light on this subject with some practical recommendations.

I must thank the David Suzuki Foundation for funding this inquiry. In my view they have made a useful contribution not only to the study of salmon farming but to the democratic process itself.

My special thanks to Eloise Yaxley, inquiry coordinator, Hal Bemister, court reporter, Sid Tafler, communications coordinator, who made a major contribution to this report, and Kevin Willis, videographer and researcher. I offer my gratitude as well to all witnesses who appeared in person or presented written material.

NOVEMBER 2001

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*Stuart Leggatt served as a judge for 17 years, retiring from the Supreme Court of British Columbia in 2000. He was a Member of the B.C. Legislature from 1979 to 1983, and a Member of Parliament from 1972 to 1979.*

[www.leggattinquiry.com](http://www.leggattinquiry.com)

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## CLEAR CHOICES, CLEAN WATERS

*The Leggatt Inquiry into Salmon Farming in British Columbia*

# Involving the Public in a Crucial Decision

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The Leggatt Inquiry into Salmon Farming in British Columbia was established September 6, 2001 to gather public input on the B.C. salmon farming industry and formulate recommendations. Stuart Leggatt, a retired B.C. Supreme Court judge, was appointed inquiry commissioner.

The David Suzuki Foundation established the inquiry in response to calls from the federal Auditor General and the Senate for public consultation and review.\* The inquiry operated independently and set its own terms of reference and guidelines. The Auditor General is the independent watchdog for the federal government. The Auditor General's report was tabled in the House of Commons in February 2001, and the Report of the Standing Senate Committee on Fisheries was tabled in June 2001. The Department of Fisheries and Oceans has not followed up on the Auditor General's recommendations, or on the Senate recommendations.

There are 126 salmon farming tenures in British Columbia. These include 121 farms in coastal waters, of which about 95 are active at any time. In addition, there are five freshwater tenures on three lakes for raising smolts and a number of land-based hatchery operations around the province.

A provincial moratorium on new farm sites has been in place since April 1995, although the industry has expanded substantially since then by intensifying production at existing farms. Industry operators would like to expand the number of farms, citing the potential for economic activity, increased employment and government revenues. Those opposed to expansion refer to environmental degradation, the potential impacts of disease transfer and escaped farmed salmon on wild salmon stocks and other concerns.

The B.C. government has indicated it supports expansion but wishes to balance environmental protection with economic development. The government says it proposes to establish operational standards in co-operation with the industry, the federal government, First Nations, commercial and sport fishers, environmental groups and local governments.

\* Details of the Auditor General and Senate reports may be found in Appendix B.

### The Leggatt Inquiry Terms of Reference

Recent reviews of the salmon farming industry by the Auditor General and the Canadian Senate raised concerns that the industry is being inadequately managed and passes on risks and costs to the general public. A citizen's inquiry will ask for community and public input on the salmon farming industry in order to formulate recommendations and pass them on to the Prime Minister of Canada, the Premier of B.C. and the general public.



*Stuart Leggatt opens inquiry hearing in Tofino: witnesses from all walks of life*

## Inquiry methods and procedures

The inquiry held public hearings at the following locations and dates:

OCTOBER 1	<i>Tofino</i>
OCTOBER 3	<i>Port Hardy</i>
OCTOBER 4	<i>Alert Bay</i>
OCTOBER 5	<i>Campbell River</i>
OCTOBER 9-12	<i>Vancouver</i>

The inquiry heard from a broad cross-section of witnesses representing community government, First Nations, conservation groups, the salmon farming industry, former and current salmon farm workers, suppliers and contractors to the industry, eco-tourism and sports fishing operators, scientists and researchers, the commercial fisheries, former senior provincial and federal regulators, the State of Alaska and others. During eight days of hearings, 109 witnesses appeared. The inquiry received 63 written submissions. Testimony arrived from as far afield as Hokkaido, Japan and Beaver Harbour, N.B. and from many British Columbia communities on the coast and elsewhere.

The inquiry invited federal and provincial ministers in areas of responsibility for fisheries and aquaculture. The ministers declined to attend by written response. The BC Salmon Farmers Association was invited as well, but neither attended nor responded to our invitation.

The inquiry commissioner and staff flew over many of the salmon farms in the Broughton Archipelago by float-plane, observing fish farms in operation and employees at work. We toured the Englewood Packing Company fish processing plant near Port McNeill at the invitation of plant managers. The inquiry visited community and cultural facilities of the 'Namgis First Nation in Alert Bay at the invitation of Chief William Cranmer, chair of the Musgamagw Tsawataineuk Tribal Council.

We were struck by the courtesy, sincerity and goodwill of witnesses from all walks of life and on all sides of the issue. We were reminded once again that the people of British Columbia, regardless of the passion and commitment they bring to an issue, are almost invariably public-spirited, fair-minded and closely connected to the communities, lands and waterways they call home. These qualities, we feel certain, can resolve the conflicts and contradictions of the salmon farming industry.

The inquiry maintained a website at [www.leggattinquiry.com](http://www.leggattinquiry.com) which remains available for further information, including this report and verbatim testimony of all witnesses who appeared at public hearings.



# CLEAR CHOICES, CLEAN WATERS

*The Leggatt Inquiry into Salmon Farming in British Columbia*

## On With the Job

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### Addressing the impact of salmon farming on B.C. communities and the environment

**I**t's time to get on with the job. The job is a big one, but we owe it to ourselves and to the magnificent legacy we call the coast and rivers of British Columbia, the very lifeblood of our province.

The job is cleaning up the environmental degradation left behind by the salmon farming industry, preventing further damage in the future and involving nearby residents in this process and the future direction of the industry.

Many people of the coastal communities affected by salmon farming, particularly First Nations, demand that we take on this job with no further delay.

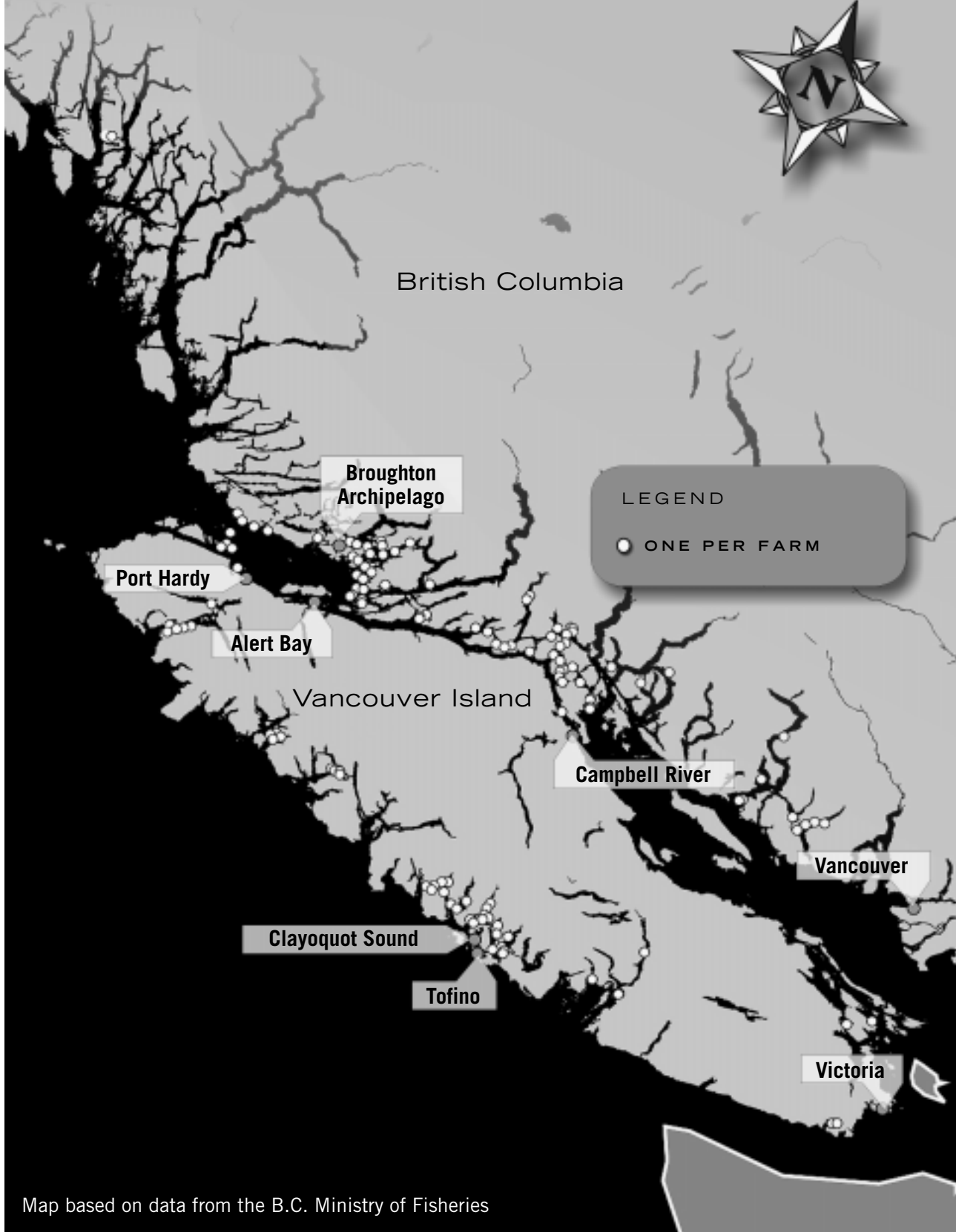
There is almost uniform consensus, even among supporters of the salmon farming industry, that environmental standards must be improved. Of primary concern are the impacts on people whose livelihood and way of life have suffered due to environmental degradation. The marine resources at risk provide a fundamental link to our economy and identity and the life cycle of our lands and waters. We are forewarned by more drastic effects of salmon farming in other places and legitimate concerns of similar consequences in British Columbia if we fail to take action.

During the first two weeks of October, 2001, the Leggatt Inquiry into Salmon Farming in British Columbia traveled to five British Columbia communities to hear witnesses and collect written testimony on the salmon farming industry. We became part of the ongoing discussion about this industry that operates about a hundred working salmon farms on our coast. In recent years, this discussion has involved the Senate and the Auditor-General of Canada and a detailed review by the provincial Environmental Assessment Office.

Reports of all these proceedings have highlighted environmental impacts and weaknesses in regulation and enforcement. Our inquiry adds to this list. We value the work that has been accomplished in the past and are certain the debate will

*We are forewarned by more drastic effects of salmon farming in other places and legitimate concerns of similar consequences in British Columbia if we fail to take action.*

### Marine Salmon Farm Tenures in British Columbia



Map based on data from the B.C. Ministry of Fisheries

continue at many levels. But action in the water to reduce environmental degradation has not kept pace with the findings and recommendations of these reviews.

The case for new standards has been made and the time for action is upon us. We must move forward to protect our resources, to require the salmon farming industry to drastically reduce or eliminate environmental degradation. To achieve these ends, government must work with the industry to engage the people who live in adjacent areas and depend on these resources. Where possible, involving local people should include sharing the benefits of a cleaner, more responsible salmon farming industry as well as meaningful participation in decisions about its future.

Although these tasks may be challenging, we believe they are achievable and feasible, and inevitably, in the best interests of the industry.

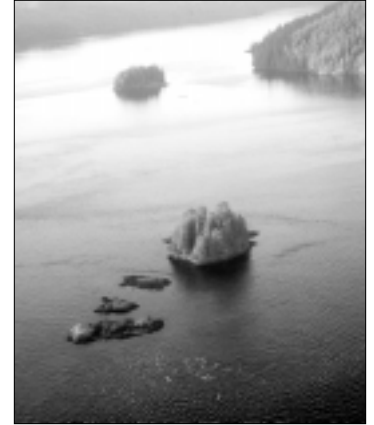
Our inquiry heard of many proposed methods to accomplish these tasks. We are convinced that salmon farms can be operated responsibly in our waters. We also heard evidence that after 30 years, this industry has matured and consolidated in British Columbia, that costs have decreased while levels of production have increased. The time has long passed to treat salmon farming as an emerging enterprise, permitted to offload its environmental and social responsibilities. If we have the will to demand higher standards, we are certain that with guidance, the industry will find the way to adopt them.

Our inquiry heard of the debate that surrounds this industry, of the support for economic benefits on the one hand and the criticism of environmental and social impacts on the other. Unless we take action at this time, we risk polarization, a hardening of attitudes that will benefit neither the industry nor the impacted communities and interest groups. Despite the intensity of this debate, a review of this inquiry and other related material indicates general agreement on key issues. These elements of agreement can be galvanized into consensus if leading agencies take immediate steps to end the conflicts and contradictions at the core of this industry.

The agreement we speak of can be paraphrased this way: the salmon farming industry can have a bright future in this province if it moves away from environmental degradation and involves residents and interest groups in this process and the future of the industry. These measures go hand in hand. By the same token that proponents of the industry recognize that environmental standards must be improved, many critics acknowledge the salmon farming industry will continue to play a role in the economy of our province. Aquaculture is a world industry that has grown by great measures both in British Columbia and elsewhere in the last decade and will continue to grow in the future.

We are reminded that nearly 20 years ago, the B.C. government instituted a policy of “sympathetic administration” in its regulation of the forest industry, in response to economic difficulties. This regime meant that regulations were not enforced, which led to over-harvesting and degradation of our forests in some regions, impacts that have continuing long-term effects. It took many years of concerted effort to reform some of these practices, as the sympathy of administration persisted well beyond the period of economic difficulty.

We face a similar reality in our salmon farming industry. Government agencies, at both the federal and provincial level, practice sympathetic administration of the



*The Broughton Archipelago, between northern Vancouver Island and the mainland, where many of B.C.'s salmon farms are located*

*I remember reading some 17 years ago . . . about the mass devastation that fish farms will bring to our B.C. coast . . .*

*I have not seen any mass devastation. I've seen a viable, strong industry that has taken a very small piece of property to operate in.*

DALE DORWARD,  
CONTRACTOR, PORT HARDY

*I truly believe if salmon farming is done in a manner respectful of all of us . . . we could jointly support some form of initiative that we can all understand and create the wealth that this province so needs.*

JOHN HENDERSON,  
KWAKWAKWATL DISTRICT  
COUNCIL, CAMPBELL RIVER

salmon farming industry. Our marine resources and other users of these resources, who often operate under conversely stringent regimes, bear the brunt of this policy.

We believe it is in the interest of all parties, including the salmon farming industry itself, to begin moving at once to a regulatory regime that demands minimal negative effect on the environment. Industry expansion depends on public support, and that support will be denied if people perceive the industry as damaging to the environment.

As it currently operates, salmon aquaculture is not welcome in many communities on our coast. In the Broughton Archipelago and Clayoquot Sound, where many of B.C.'s salmon farms are located, there is strong opposition to current operations and any further expansion. Public pressure led the Comox-Strathcona Regional District to reject a proposal to relocate three salmon farms to Bute Inlet on the mainland last summer. Perhaps most important, the adamant opposition to salmon farming expressed by coastal First Nations may solidify into rejection of access as these Nations become empowered through the treaty process.

The salmon farming industry in British Columbia and the government agencies responsible for regulation can choose to carry on business as usual and face continued opposition and rejection. Or they can work to diminish negative effects on the resources and environment and form a true working partnership with the people who live in the regions where they operate. The choice is clear. The time for action is now.

## CLEAR CHOICES, CLEAN WATERS

*The Leggatt Inquiry into Salmon Farming in British Columbia*

# The Challenge of Salmon Farming

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### Major issues addressed by the inquiry

**B**alancing economic benefits with environmental impacts is a familiar challenge to British Columbians. The natural heritage we value, enmeshed with our identity as people of the coast, rivers, forests and mountains, is also the repository of much of our wealth. For thousands of years, the people who have occupied this domain have made their livelihood from the natural bounty of our lands and waters.

New challenges, such as industrial forestry and fishing, urbanization and now aquaculture, have strained the balance between economic activity and the desire to sustain our resources and conserve the best of our natural environment. In recent years the challenge has become more complex as resources have diminished and the eco-tourism industry has demonstrated that our natural environment is an economic asset in itself.

The quest for an appropriate balance between environmental protection and economic development is the stated goal of the salmon farming industry and regulatory agencies of both the B.C. and federal governments.

The findings of this commission indicate the industry is in a serious state of imbalance, that environmental degradation has largely gone unchecked, that government agencies do not adequately monitor nor regulate the industry. There are even indications that in some areas of operation, the industry is moving backwards on environmental controls and that problems have been exacerbated as the industry has expanded. A specific finding is that pollution of the environment caused by net-cage salmon farming may well violate the federal Fisheries Act, particularly Sections 34 and 35 that deal with fish habitat protection and pollution prevention (Appendix C).

The imbalance applies to communities and individuals as well. Many British Columbians who live in adjacent communities have been subject to the negative impacts of salmon farming but have received few if any of the benefits and have been denied adequate consultation.



*A salmon farm in the Broughton:  
a serious state of imbalance*

*A specific finding is that pollution of the environment caused by net-cage salmon farming may well violate the federal Fisheries Act.*

*This is the route in  
which our efforts should  
be directed, rejuvenation  
of natural wild stock  
salmon to west coast  
rivers, not creating a  
risky industry of inferior  
salmon through  
expensive farming.*

VAN EGAN,  
RETIRED TEACHER,  
CAMPBELL RIVER

Speaking of imbalance, most witnesses at the inquiry were critical of the industry. We have no way to judge whether this is proportionate to overall sentiment in the province or the communities we visited. Government regulators and the B.C. Salmon Farmers Association, which represents much of the industry, chose not to participate. However, we did hear from supporters or industry operators in every community we visited. They have a case to make, based mostly on economic benefits, and in many instances, they made it well.

This is the essence of the positive side of salmon aquaculture: jobs, capital spending, tax revenues and spin-off benefits, especially in remote communities where other opportunities are limited. We also heard from former government officials on both sides of the issue. But more detailed information from the industry and its major operators, as well as from provincial and federal regulators, would have been welcome and useful. Where we could, we attempted to fill in missing information.

Some of the environmental and social impacts raised at this inquiry have been researched, documented and substantiated; in other cases, the evidence was less compelling or circumstantial; other issues raised are concerns about future effects similar to negative outcomes in other places where more intensive salmon farming is practised. There was more than enough convincing evidence presented at the inquiry to warrant serious concern about the negative effects of current and future operations of the industry.

## FIRST NATIONS AND SALMON FARMING

### *Rights, risks, responsibilities*

For many generations, British Columbia's coastal First Nations thrived on the bounty of the sea and practised stewardship based on sustainable use and maintenance of resources for future generations. In recent years, much of this resource base has been lost and many communities have been reduced to poverty, witnesses told the Leggatt inquiry.

The inquiry heard strong opposition to salmon aquaculture from First Nations leaders and individuals. Some contend salmon farming is a denial of aboriginal rights and a threat to the resources they have depended on for generations. This opposition to salmon farming was not unanimous, but represented a significant majority of the First Nations witnesses we heard.

The message to our commission from many First Nations representatives was clear and unequivocal: we oppose fish farms in our territories and we consider the failure to consult with First Nations on this issue to be immoral and possibly illegal.

Chief William Cranmer of the Musgamagw Tsawataineuk Tribal Council of Alert Bay told the inquiry: "We do not want fish farms in our territories, nor have we ever agreed to the placement of fish farms within our territories and we continue to hold the governments accountable for the improper siting of all fish farms within our territories."

The lands and waters of British Columbia continue to be the subject of claims of aboriginal title and aboriginal rights. These claims have been acknowledged by the courts and have not been resolved by governments.

First Nations argue it is unjust, risky and unnecessary for the aquaculture

industry to have expanded and to continue to expand into new territories before their claims are resolved.

The concerns of aboriginal peoples about salmon farming in general or the specific siting of fish farms in particular have been brushed aside as the industry has developed in British Columbia. This lack of effective involvement of native peoples could severely damage the present fish farming industry if it was found to be operating in violation of the law.

Some First Nations witnesses talked of their way of life being destroyed. This speaks of a crisis that transcends many of the issues presented at this inquiry. "Our access to our traditional foods is a major link to our traditional way of life and our culture," said Chief William Cranmer. "To watch this being destroyed is to witness genocide."

First Nations traditions of food-gathering and resource management evolved on this coast for thousands of years. The values these traditions embody are still vital to First Nations today. Some may apply to our larger society as well, especially in this era of great resource depletion. These values were specifically adapted to this region, these lands and resources. They stood the test of time and should not be discarded out of hand.

Long-standing traditions of gathering clams and seaweed that must be abandoned because of environmental degradation as a consequence of salmon farming waste represents a loss well beyond the commercial or food value of these resources, the inquiry was told. In many cases, the loss may be permanent, the food items difficult or impossible to replace.

The decline of the wild salmon fishery on our coast has severely affected many native communities. This downturn is the result of many factors other than salmon aquaculture. But any further threat to the wild stocks, as salmon farming is believed to represent, is intolerable to First Nations.

The B.C. government's Salmon Aquaculture Review (SAR) noted that First Nations had received very few benefits from salmon aquaculture but experienced a greater impact than any other group. It also noted that recent court rulings on aboriginal rights established the province's obligation to ensure that a proposed activity will not unjustifiably infringe aboriginal rights.

First Nations have protested specific fish farm siting in their traditional territories in the past as well as recent relocation of farms, often to no avail. Concerns they have voiced about the risk of environmental damage have come to pass. And now, their current warnings are being ignored once again.

Yvon Gesinghaus, general manager of the Musgamagw Tsawataineuk Tribal Council, said the 3,000 people of the area oppose salmon farming, except for nine who are employed in the industry.

Ed Newman of the Heiltsuk Nation of Bella Bella said the Heiltsuk Hemas Council of hereditary chiefs is opposed to the expansion of Atlantic fish farms into their territories. Newman said his people are in conflict with their Kitasoo neighbours to the north in Klemtu who are involved in a salmon farming operation, now the northern-most location of salmon farms in the province.

In Tofino, the Nuu-chah-nulth Tribal Council also expressed opposition to salmon farming, contending it is "not an environmentally sustainable activity and poses

*This lack of effective involvement of native peoples could severely damage the present fish farming industry if it was found to be operating in violation of the law.*

*We may very well lose  
our way of life, and  
we will be destroyed.  
And the saddest thing  
is we will have let our  
ancestors down, and we  
will have nothing left  
to pass on to our children  
or our grandchildren.*

YVON GESINGHAUS,  
GENERAL MANAGER,  
MUSGAMAGW TSAWATAINEUK  
TRIBAL COUNCIL, ALERT BAY

### A special fiduciary relationship

A special fiduciary relationship between the Crown and aboriginal peoples has been recognized by the courts of Canada, most particularly by the leading decision of *Delgamuukw v. British Columbia* [1998] 1 C.N.L.R. 14.

To quote the brief presented to the inquiry by Chief Simon Lucas, co-chair of the B.C. Aboriginal Fisheries Commission:

We say that the alienation of coastal areas for fish farms cannot be justified because there has been neither consultation nor compensation.

And to quote from *Delgamuukw v. British Columbia*:

This aspect of Aboriginal title suggests that the fiduciary relationship between the Crown and Aboriginal peoples may be satisfied by the involvement of Aboriginal peoples in decisions taken with respect to their lands. There is always a duty of consultation. Whether the aboriginal group has been consulted is relevant to determining whether the infringement of Aboriginal title is justified, in the same way that the Crown's failure to consult an aboriginal group with respect to the terms by which reserve is leased may breach its fiduciary duty at common law: *Guerrin*. The nature and scope of the duty of consultation will vary with the circumstances. In occasional cases, when the breach is less serious or relatively minor, it will be no more than a duty to discuss important decisions that will be taken with respect to lands held pursuant to Aboriginal title. Of course, even in these rare cases when the minimum acceptable standard is consultation, this consultation must be in good faith, and with the intention of substantially addressing the concerns of the Aboriginal peoples whose lands are at issue. In most cases, it will be significantly deeper than mere consultation. Some cases may even require the full consent of the Aboriginal nation, particularly when provinces enact hunting and fishing regulations in relation to Aboriginal lands.

serious threats to human health, wild salmon and other natural aquatic resources.”

Chris Cook, president of the Native Brotherhood of British Columbia, said some native bands have become involved in fish farming because of a lack of other opportunities. He said he feared they were being used as pawns by the aquaculture industry.

Robert Germyn of the Heiltsuk Tribal Council expressed the conflict some First Nations feel about salmon farming. Although the council opposes salmon aquaculture in their territory, the Heiltsuk accept Atlantic salmon from Klemtu for processing in their fish plant two days a week. Germyn said this may seem hypocritical, but is a response to the needs of the Heiltsuk people. “So many of our members are hungry to work and eager to work.”

John Henderson of the Kwakiutl District Council said of First Nations who work in salmon farming: “When you’ve got 95 per cent unemployment in your community, you have no real alternative . . . it’s almost like this job was forced upon them by the downturn of the salmon industry.” That decline has devastated First Nations



communities, he said. "And the devastation I've seen . . . nobody in the room would realize it until you've gone out to these villages and seen it."

But other First Nations leaders say they refuse to be involved in salmon farming, and have turned down opportunities to co-venture with aquaculture companies because of environmental damage and threats to the wild stock. "Most First Nations people cannot work in a fish farm," said Yvon Gesinghaus. ". . . they take the job to feed their family, and they work there and they see the damages . . . and they couldn't work there any more and they quit."

Dr. Martin Weinstein, aquatic resources coordinator for the 'Namgis First Nation, told the inquiry that fisheries cooperatives in Japan could be studied as a model for community economic development. These cooperatives are involved in both aquaculture and traditional fishing. Fishing rights are based on residency and apprenticeship and are not transferable. In addition to fishing and aquaculture, the Japanese cooperatives are involved in marketing, banking and fishing gear supply.

The modern shaping of fisheries in British Columbia began during the 19th century, Dr. Weinstein told the inquiry. A new system of property based on the British legal tradition was imposed over existing aboriginal frameworks. In the aboriginal system the territory and rights belonged to the community and could not be alienated. But under the current fish farm system property rights are being created which may be transferred out of the province and the country.

Is there a role for First Nations people in a properly regulated fish farming industry? Different models can be considered, different forms of ownership might be considered, but the First Nations must be consulted, must be involved in an ownership and equity position so that those economic benefits can flow directly to First Nations communities.

## ECONOMIC BENEFITS OF THE SALMON FARMING INDUSTRY

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Several salmon farm operators and supporters of the industry spoke of the economic benefits to employees, communities and government. They noted that many communities where the industry has flourished, such as Campbell River and Port Hardy, have suffered declines in other industries in recent years. Economic activity generated by the salmon farming industry has helped fill these gaps and has been welcomed in these communities.

The B.C. Ministry of Agriculture, Food and Fisheries reports that the industry produced 49,400 tonnes of farmed salmon with a wholesale value of \$320 million in the year 2000.

The BC Salmon Farmers Association reports on its website that about 3,000 people are employed directly and indirectly in the industry. Over 92% of the direct jobs are in coastal communities outside Victoria and Vancouver.

B.C. farmed salmon is an important export crop and now commands a higher price on world markets than wild salmon, said Bill Vernon of Creative Salmon Farming in Tofino. Mr. Vernon said his company had a payroll of \$1.2 million and spent over \$6 million on supplies and services last year. His company also strives to minimize escapes and meet high environmental and social standards.

*I'm tired of sending  
letters. I'm tired of  
talking. I hope my people  
stand up and start to  
fight . . . And I hope  
that there's a thing like  
Burnt Church here . . .  
because nobody will pay  
attention to us.*

CHRIS COOK, PRESIDENT OF  
THE NATIVE BROTHERHOOD  
OF BRITISH COLUMBIA,  
ALERT BAY

The salmon farming industry contributed \$136 million to the economy of the Campbell River Regional District in the year 2000, Patrick Marshall of Rivercorp, an economic development agency, told the inquiry.

The salmon farming industry world-wide is worth \$2 billion and British Columbia is poised to benefit from dramatic increases in demand, said Jim Anderson, former director of Aquaculture and Commercial Fisheries for B.C. Mr. Anderson said the B.C. industry has become more efficient in recent years as costs have decreased and production has increased. He spoke of British Columbia's natural advantages to benefit from industry expansion: thousands of miles of coastline, a clean marine environment and the labour force and services in our coastal communities.

#### ESCAPES OF ATLANTIC FARM SALMON AND COLONIZATION OF PACIFIC SALMON HABITAT

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As much as 80 per cent of the salmon raised in B.C. fish farms are Atlantic salmon, a species introduced by the industry. Over 413,000 Atlantic salmon escapes were reported between 1991 and 2001 by the Atlantic Salmon Watch Program. The word "reported" is relevant. It is difficult to estimate how many escapes went unreported, how many Atlantic salmon leaked out of net cages during various stages of their growth. Estimates range to two million fish.

Adult Atlantic salmon have been found and caught in British Columbia in the ocean and fresh-water systems, both in the adult and juvenile stages. Atlantic salmon have been found in 77 B.C. rivers and five streams, including three rivers where the offspring of escaped Atlantic salmon have been discovered, reported Dr. John Volpe of the University of Alberta. Atlantic salmon have also been found off the coast of Alaska in remote locations as distant as Prince William Sound and the Aleutian Islands.

Many witnesses spoke of past assurances from the industry and government regulators that Atlantic salmon would not escape or, if they did, would not survive in the wild. Contrary to these statements, marine researcher Alexandra Morton quoted a Feb. 19, 1991, memo from R.M.J. Ginetz, federal chief of the aquaculture division: "In my view it is only a matter of time before we discover that Atlantics are gaining a foothold in B.C. . . . Do we prepare public/user groups for the possibility, and strategically plant the seed now, or do we downplay the idea and deal with the situation if and when it occurs?" The subsequent escape of hundreds of farm fish and the discovery of their offspring in B.C. rivers appear to be a realization of Mr. Ginetz's prediction. Some inquiry witnesses felt it is only "a matter of time" before Atlantic salmon displace native salmon.

New species should be subject to research to show they won't harm existing species and ecosystems before they're introduced, says Daniel Simberloff of the University of Tennessee, a U.S. expert on introduced species. "The complexity of ecological interactions, the history of past introductions, and the potential ecological and economic costs on new ones strongly support the recommendation that every proposed introduction be viewed as potentially problematic until substantial research suggests otherwise." Mr. Simberloff's research was quoted by Dave Gaudet, special assistant to the Commissioner of Alaska Fish and Game.

*You're just hiding your  
head in the sand if you  
argue that the possibility  
that Atlantic salmon  
will successfully invade  
is remote. I think that  
has essentially happened.*

DR. RICK ROUTLEDGE,  
CONTINUING STUDIES IN  
SCIENCE, SIMON FRASER  
UNIVERSITY, VANCOUVER

Atlantic salmon have apparently become established on B.C.'s coast and are producing succeeding generations. Scientists, First Nations and others are concerned that this invasive species will prove detrimental to wild Pacific salmon.

#### DISEASE AND PARASITE TRANSFER FROM FARM SALMON TO WILD PACIFIC SALMON

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Many witnesses expressed concerns or cited cases of disease and parasite transfer from farmed salmon to wild salmon. Many fish farms are located on wild salmon migration routes, which may lead to contagion of adult salmon migrating to rivers and smolts migrating to the ocean.

Biologist Alexandra Morton spoke of a 28 per cent loss of coho smolts from a hatchery program to furunculosis in 1991. She said salmon farmers admitted placing Atlantic salmon smolts infected with this disease into pens that the coho migrated past.

Several witnesses spoke of a sea lice epidemic in the Broughton Archipelago in the spring and summer of 2001. Ms. Morton said 800 salmon fry she inspected in the Broughton were infested with 7,000 sea lice.

Fishing guide Chris Bennett said an over abundance of sea lice "was obviously from the farms." Fish caught in the vicinity of salmon farms were infested with lice, but others caught at a distance from the farms were not.

Laurie MacBride of the Georgia Strait Alliance quoted a 1999 report from the Scottish Environmental Protection Agency: "Damage to stocks of sea trout and wild salmon by sea lice associated with caged fish farming is very serious in certain circumstances, and should now be accepted as beyond a reasonable doubt."

Several witnesses expressed concerns about the possibility of an outbreak of Infectious Salmon Anemia in B.C. This disease has occurred in other places where salmon farming is prevalent, including Norway, Scotland, New Brunswick and Maine, sometimes with disastrous results. Dr. Rick Routledge of Simon Fraser University reported that 600,000 salmon were slaughtered in Maine this year in an attempt to control this disease. Some witnesses fear the disease will inevitably spread to British Columbia.

#### ENVIRONMENTAL EFFECTS OF WASTE AND OTHER SUBSTANCES RELEASED FROM SALMON FARM NET-CAGES

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Many witnesses expressed concern about salmon farm waste, consisting of fish droppings and uneaten feed collecting below salmon farms. Chemist Sergio Paone and other witnesses said the waste destroys life forms beneath the sites.

Other witnesses said farm waste spreads beyond the areas beneath the sites to pollute other parts of the marine environment. Several First Nations speakers on both sides of Vancouver Island said this pollution has curtailed their traditional food gathering of items such as clams, ducks, crabs and seaweed.

'Namgis clam digger Joseph Taylor reported various species of clam have disappeared from the vicinity of fish farms or can no longer be harvested due to pollution. Yvon Gesinghaus, general manager of the Musgamagw Tsawataineuk Tribal Council in Alert Bay, said clam-digging in her family was once pursued through the Broughton but is now restricted to a single beach.

*The risks inherent in salmon farming have been downplayed if not ignored . . . . risks have been foisted onto the natural ecosystem and most particularly the wild salmon.*

RON MACLEOD,  
SAVE OUR FISH FOUNDATION,  
FORMER DIRECTOR GENERAL,  
PACIFIC REGION,  
DEPARTMENT OF FISHERIES  
AND OCEANS, VANCOUVER

*I understand the jobs arguments. . . . I mean, yes, we all need jobs. But at what and whose expense? You know, we also need this environment. We can't put the environment second.*

CARMEN BURROWS,  
MALCOLM ISLAND  
ENVIRONMENTAL  
PROTECTION SOCIETY,  
SOINTULA

Bill Vernon of Creative Salmon said waste beneath salmon farms may stimulate the growth of some species and is often temporary as farms are fallowed between production cycles.

The Salmon Farming Monitoring Report, released Aug. 28, 2001 by the B.C. Minister of Water, Land and Air Protection, revealed that pollution occurs beneath every one of 94 salmon farms tested for physical and chemical data, said Lynn Hunter, fisheries and aquaculture specialist with the David Suzuki Foundation.

Some witnesses pointed out that agricultural operators, such as cattle ranchers or chicken farmers, are prohibited from dumping their wastes into rivers and that fish farmers should be prohibited from dumping waste into the ocean environment.

Other witnesses told of environmental degradation from antibiotics, pesticides, paints, disinfectants, immuno-stimulants, colouring agents, binders, anti-oxidants, preservatives, bleaches, anti-fouling agents and other additives and chemicals released from salmon farm net cages and associated sites. Others noted debris left behind when salmon farms are abandoned. Bill Vernon of Creative Salmon said his company had reduced the use of antibiotics by 97.3 per cent in the last three years.

#### REMOVAL, STORAGE AND DISPOSAL OF DEAD FARM SALMON

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Some witnesses spoke of pollution from massive die-offs of farmed salmon. The inquiry heard reports of dead salmon left in their pens or in on-site storage containers for lengthy periods and of improper disposal of dead salmon at sea or on land.

Both the Nuu-chah-nulth Tribal Council and the Friends of Clayoquot Sound discussed the massive die-off of salmon at Bare Bluff in Bedwell Inlet due to a toxic algae bloom last summer. The Nuu-chah-nulth had protested the location of this farm in 1998, citing aboriginal rights infringement and potential harm to adult and juvenile salmon. The Friends of Clayoquot Sound said 100,000 salmon weighing 200 tonnes died at Bare Bluff and were left rotting in the water for over a month. The Ahousaht First Nation Fisheries presented a video showing rotted salmon floating in net-cage pens, overflowing, oozing storage containers on land and dead salmon being pumped from pens, the wash flowing into the ocean.

Robert Corlett, a former salmon farm contractor, told the inquiry that in the past, farms were equipped with specialized equipment and staff would work around the clock to remove dead fish. "I don't understand why those fish were left to rot in the pens," he said of the Bare Bluff die-off.

#### PREDATION BY FARM SALMON OF JUVENILE WILD SALMON AND OTHER SPECIES

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Witnesses reported that farmed salmon prey on salmon smolts, oolichan, herring and other fish and sea life. These small fish are attracted to the net-cage pens by night lights at salmon farms and swim inside the nets. Other predator species are also attracted to the pens and eat these small fish outside the nets.

Pat Alfred of the Kwakiutl First Nation said pit-lamping, or attracting fish with lights, was banned in the commercial fishery more than 30 years ago. The use of

night lights at fish farms is the equivalent of pit-lamping, he said, as it attracts small fish as well as predator species.

Greg Wadhams of the 'Namgis First Nation said floodlights help salmon farmers reduce the cost of feeding their stock by attracting small fish and other ocean organisms into the net cages.

#### THE CUMULATIVE EFFECTS OF SALMON FARMING ON THE HEALTH OF WILD SALMON AND OTHER SPECIES

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There are widespread concerns that net-cage salmon farming is detrimental to wild Pacific salmon and may destroy wild salmon runs.

The sea lice epidemic in the Broughton Archipelago, the discovery of Atlantic salmon and their progeny in the B.C. marine environment and the disappearance of wild stocks and in Europe and outbreaks of Infectious Salmon Anemia in other areas fuel these concerns.

Witnesses were concerned that escaped farm salmon would occupy the ecological niches of wild salmon stocks, which are already depleted in some parts of the coast. Some witnesses suggested that government regulators have given up on the wild fishery and are investing public resources in salmon farming in its place.

"Our greatest fear . . . is that the wild stock will be destroyed," said Chief William Cranmer of the Musgamagw Tsawataineuk Tribal Council.

In written testimony, witness Leslie Smith quoted the late Roderick Haig-Brown, B.C. writer and conservationist: "The Fraser River salmon runs have served mankind for ten thousand years. If we give them a chance, they can last as long as mankind, perhaps longer . . . To destroy them would be an act of vandalism. . . . To preserve them is an act of faith in the future."

The inquiry was reminded that wild salmon are more than a resource. They are not only crucial to the commercial, aboriginal and sports fishery, but are essential to coastal and inland ecosystems and the very identity of British Columbia, its people and wildlife. Killer whales, already in decline on our coast, bald eagles, grizzly bears and many other species depend on wild salmon runs for their survival.

#### THE ROLE OF GOVERNMENT IN REGULATION OF SALMON FARMING, THE SALMON FISHERY AND WILD STOCKS

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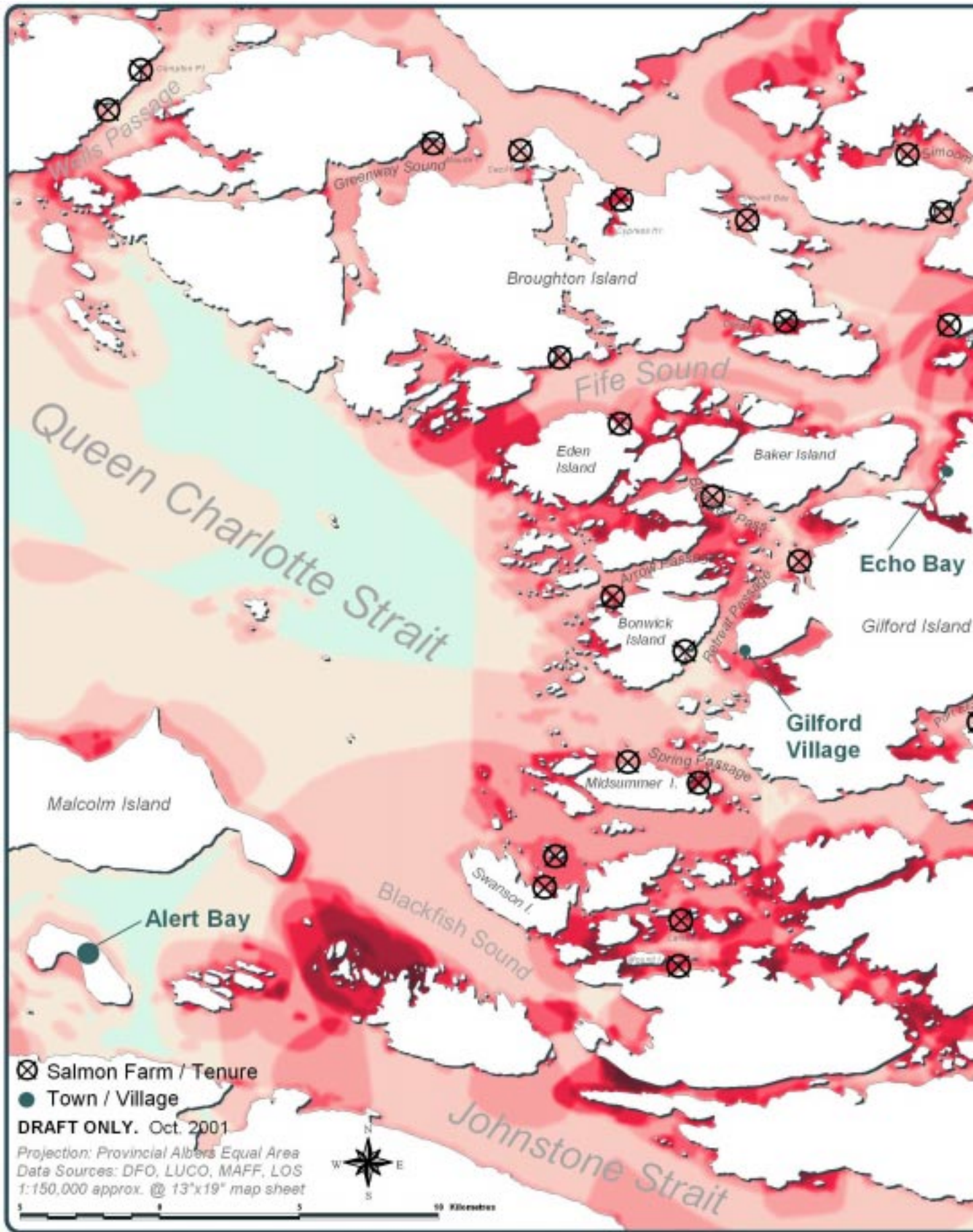
Many witnesses said provincial and federal regulators are failing to effectively monitor and regulate the industry and its impacts on the environment and other interests. At the same time, witnesses felt the Department of Fisheries and Oceans is not meeting its responsibilities to protect wild salmon stocks.

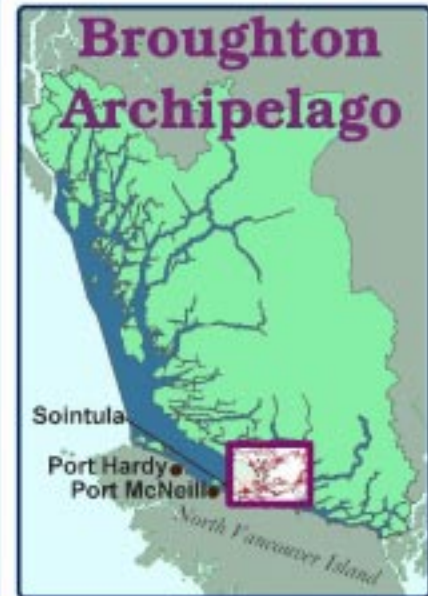
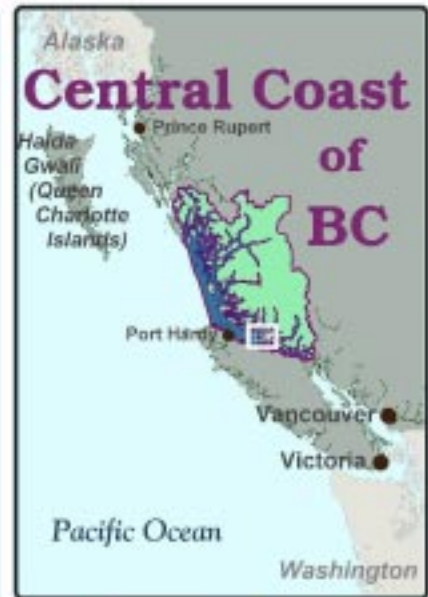
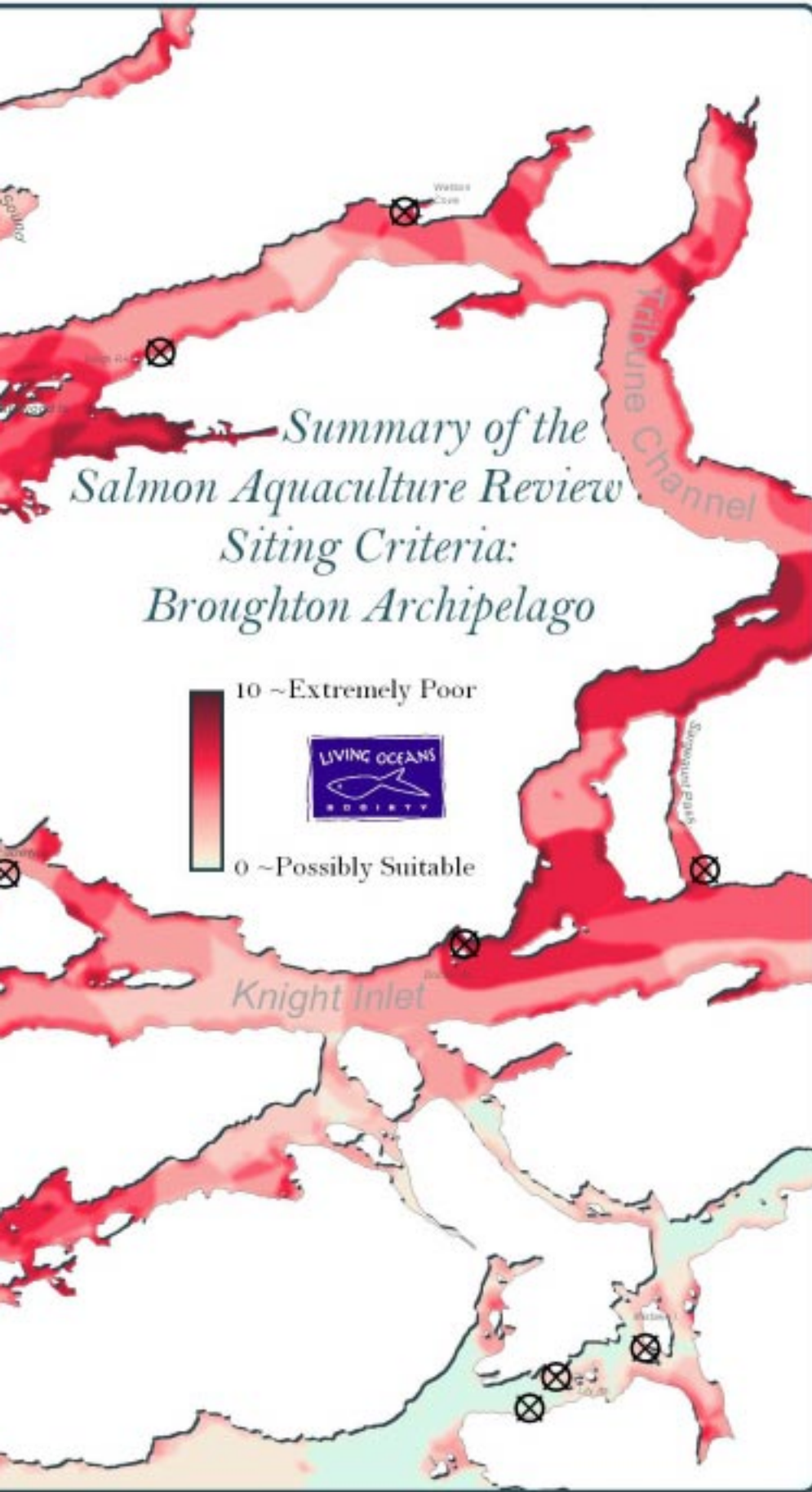
Several witnesses cited an apparent conflict of interest within DFO. They are concerned that the department is mandated by law to protect wild fish, but promotes and supports the salmon farming industry, which has proven to be detrimental to wild stocks. DFO has allocated \$75 million over five years to support aquaculture development.

Particularly worrisome is the inability of DFO to articulate a statement that wild

*Marine organisms,  
unlike the infamous Ford  
Explorer SUV and their  
Firestone tires, cannot  
be recalled once released.  
Biological pollution can  
be permanent.*

JOHN CUMMINS, MP,  
OPPOSITION FISHERIES  
CRITIC AND VICE-CHAIR,  
FISHERIES COMMITTEE,  
DELTA





In this overview map of the Broughton Archipelago, we have summed up the Salmon Aquaculture Review Siting Criteria (BC Environmental Assessment Office, Aug. 1997) to determine good and poor placement of salmon farms. The following criteria were mapped:

- 1km around the mouths of salmon streams
- 1km around herring spawn areas
- 300m around regular use shellfish beds
- 125m around other shellfish beds
- sensitive fish habitat: kelp
- important wildlife areas (breeding etc.) Including: salmon, eulachon, birds
- critical habitat for red/blue species: Orca, humpback, gray, marbled murrelet
- muddy areas
- >30m depth except in current areas (20m)
- anchorages
- large study areas & parks (>1000ha.)
- 1km from small study areas & parks
- 1km from First Nations reserves
- important tourism sites
- important commercial & sport fishing areas

salmon will enjoy management priority in decisions about salmon on the west coast, said The Honourable John Fraser (PC), chairman of Pacific Fisheries Resource Conservation Council, and former Minister of Fisheries.

Government monitoring and enforcement of salmon aquaculture is inadequately funded, under-staffed and dependent on industry compliance without independent verification, said Don Hall, a fisheries biologist with the Nuu-chah-nulth Tribal Council.

Chemist Dr. Sergio Paone cited violations of the B.C. Waste Management Act by salmon farmers, which had not been enforced.

When the sea lice outbreak was discovered in the Broughton Archipelago last spring, DFO was slow to react, several witnesses said. When the department finally sent a vessel to conduct a test fishery to determine the extent of the problem, they tested for sea lice in other areas but not the Broughton itself.

The provincial government's Salmon Aquaculture Review produced 49 recommendations in 1997, dealing with issues such as farm siting, waste discharges, disease control and escapes. But several witnesses said only a few of these recommendations have been fully implemented. Many others have been ignored or implemented with major shortcomings.

Despite a moratorium on new salmon farm sites, production levels at existing sites have doubled between 1995 and 2000 with no government controls or sanctions, testified Lynn Hunter, fisheries and aquacultural specialist with the David Suzuki Foundation. Ms. Hunter referred to internal government documents, which warn the province of a risk of "regulatory negligence" due to failure to control salmon farm pollution.

Twenty-five of 26 salmon farms in one area contravene siting criteria supported by both government and industry, but only five were identified by government regulators as requiring relocation, Jennifer Lash of Living Oceans Society told the inquiry.

The B.C. government is attempting to reconcile environmental, economic and social conflicts by relocating poorly sited and inactive farms. Eleven farms have been moved or are scheduled to be moved and 25 others are expected to be relocated over the next two years.

Some witnesses quoted the following statement by federal Aquaculture Commissioner Yves Bastien in 1999 as an indication the federal government is neglecting the wild fishery in favour of aquaculture: "I am absolutely convinced that when our descendants look back . . . they will view the dawn of the third millennium as the point at which mankind went from fishing to aquaculture."

#### THE DESTRUCTION OF MARINE MAMMALS AND OTHER WILDLIFE AT SALMON FARM SITES

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Witnesses told of the destruction of sea lions, seals and other animals at salmon farms. These animals are attracted to the farms as food sources and are shot by employees to prevent them from damaging net pens and preying on the fish.

Witnesses are concerned that these shootings are destructive to the environment, a loss to the eco-tourism industry and a hazard to people who travel in the vicinity of the farms.

*DFO has abdicated its  
legal responsibility to  
wild salmon and the  
communities that depend  
on a healthy fishery.*

LAURIE MACBRIDE,  
GEORGIA STRAIT ALLIANCE,  
MEMBER, PROVINCIAL  
SALMON AQUACULTURE  
IMPLEMENTATION ADVISORY  
COMMITTEE, NANAIMO



Tofino tourism operator Didier Midavaine said he has found “a lot of seals, dead sea lions, piles of them.”

Kayak tour operator Ralph Keller of Coast Mountain Expeditions said he frequently hears gunshots being fired from fish farms. He said two seal rookeries at Surge Narrows disappeared after fish farms were established in the mid-1980s. River otters and mink are also being destroyed and he witnessed a great blue heron shot at a salmon farm smolt pen. Mr. Keller said marine mammals are essential to his business, as part of the wilderness experience of clients touring British Columbia.

In Tofino, Steve Lawson of the First Nations Environmental Network showed the inquiry the remains of a sea lion with plastic feedbags tied to its flukes. He said the feedbags had been filled with rocks to sink the body to hide the evidence of the shooting. This would appear to contravene government regulations.

Bill Vernon of Creative Salmon said the migration of hundreds of California sea lions to Clayoquot Sound in the year 2000 led to a crisis as normal predator control netting was inadequate to deter these powerful, aggressive animals. Fifty sea lions were “lethally removed” from Creative farms and buried on shore. Since then, the situation has been resolved at his farms as stronger predator control nets have been installed, guns have been removed and no additional marine mammals have been destroyed.

Salmon farmers also use guard dogs and underwater noise-makers to prevent marine mammals from attacking their fish. The noise-makers have proved controversial in themselves as they deter killer whales more effectively than seals and sea lions. These whales, highly prized by tourists and researchers, were driven from the Broughton Archipelago by these devices, marine researcher Alexandra Morton testified.

*Along comes a salmon  
that does not need a  
river and so, wow,  
suddenly to a politician,  
to someone who is sitting  
in an office they are  
thinking, “Okay, we  
can have salmon and we  
can destroy the rivers.”*

ALEXANDRA MORTON,  
MARINE RESEARCHER,  
SIMOOM SOUND

## CONFLICTS WITH OTHER INDUSTRIES SUCH AS COMMERCIAL FISHING AND ECO-TOURISM

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A relatively new industry on our coast, salmon farming has engendered animosity and distrust among other marine resource users. Visual and noise pollution from the farms are added to escapes, disease transfer, waste discharges and other concerns expressed by inquiry witnesses.

In addition of the effect of environmental degradation on wild stocks, commercial fishers are also concerned about regulation and competition. Fishers contend their industry is being hampered by tight regulation while salmon farming thrives in a relatively unregulated environment. The restrictive regime imposed on the commercial fishery has created a void which is being filled by the salmon farming industry, Cathy Scarfo of the West Coast Trollers Association told the inquiry.

Some witnesses said the growth of salmon farming, in British Columbia and elsewhere, has resulted in a drastic drop in world prices which deprives B.C. salmon fishers of their livelihood. The price of sockeye in 2001 was about \$1.50 a pound, less than half of what it was eight to ten years ago, said Bruce Burrows of the United Fishermen and Allied Workers’ Union.

Some wilderness tourism operators say fish farming is incompatible with their industry as aquaculture operations destroy wilderness values. Tourism is a \$9.4 billion industry in British Columbia that employs 113,000 people. Eco-tourism

*... I am urging you  
to recommend a  
precautionary approach  
... The burden of proof  
lies with the industry  
and those politicians who  
support it at all costs to  
the environment and  
without respect for  
Canadian law.*

MICHAEL BERRY,  
BIOLOGIST, ALERT BAY

or outdoor adventure is one of the fastest-growing sectors of the tourism industry worth more than \$800 million.

The conflict between tourism and salmon farming results from industrial impacts in remote areas, said Dorothy Baert of Tofino Sea Kayaking. These include industrial buildings, generators, radio noise, gunshots, septic odour and intensive lighting, all undesirable to wilderness tourists.

The roots of much of the conflict date back to the mid-1980s when the B.C. government was siting salmon farms through the Coastal Resource Inventory System Study. Several witnesses were asked during this process to identify prime areas for fishing and other purposes in the Broughton Archipelago so they could be red-zoned to exclude salmon farm sites. Some were reluctant to reveal favored locations for fishing and food-gathering sites but were persuaded to do so by government officials who assured them that those areas would be exempt from consideration as potential fish farm sites. They felt betrayed when they discovered that salmon farms were allowed to locate at many of the sites they had designated for red-zoning.

B.C. government fisheries staff recommended at the time that the coast be zoned to restrict salmon farming to specific areas, Jim Anderson, former director of Aquaculture and Commercial Fisheries, told the inquiry. But government rejected that suggestion. Some witnesses told the inquiry they still favour coastal zone designation that would specifically permit salmon farming in some areas and prohibit it in others. This is also a recommendation of the B.C. government's Salmon Aquaculture Review.

#### CROSS-BORDER CONFLICTS BETWEEN BRITISH COLUMBIA AND ALASKA

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The current practice of salmon farming in British Columbia is clearly an irritant to good relations with B.C.'s neighbouring U.S. state of Alaska.

Several representatives of the Alaska government and legislature and the Alaska fishing industry testified about trans-border conflicts. Salmon farming and all finfish aquaculture are banned by law in Alaska because of threats to wild stocks and other resources. Yet Alaska fishers and others report that escaped Atlantic salmon from B.C. farms have migrated to their waters.

Atlantic salmon have been found and caught from the southern Panhandle to the Aleutian Islands, in the Bering Sea and in various freshwater systems, the Alaska Department of Fish and Game reported in a White Paper presented to the inquiry.

These salmon are referred to as "biological pollution" that poses a threat to wild Pacific stocks. The concerns listed in the White Paper include disease, colonization, interbreeding, predation, habitat destruction and competition. The White Paper suggests that in addition to escapes, thousands of slow-growing farm salmon have been released into the wild by industry operators.

Alaska suggests that Canada and British Columbia adopt a zero-risk management policy to prevent the escape and release of farmed salmon, allow no further farms north of present locations and cap Atlantic salmon production at current levels. The Alaskans are concerned that expansion of the industry to the Prince Rupert area near the Alaska border will exacerbate current problems.

“So far the indications are very clear that the farming of Atlantic salmon in non-native waters is posing a tremendous threat,” Dave Gaudet, special assistant to the Commissioner of Alaska Fish and Game, told the inquiry.

Mr. Gaudet said Alaska has worked hard to develop a sustainable salmon program and sound habitat management to maintain sport, subsistence, personal use and commercial fisheries as well as a healthy marine mammal population. “We find that the possibility of having this ruined through poor Atlantic salmon farming practices is unacceptable.”

## FARM SALMON AND HUMAN HEALTH ISSUES

Some witnesses spoke of health concerns associated with eating or handling farm salmon and urged that farm and wild salmon be labeled distinctively at retail outlets and restaurants. Industry supporters said farm salmon are a healthy product enjoyed by millions around the world.

Farm salmon are subject to diseases such as Infectious Salmon Anemia and outbreaks have led to the slaughter and quarantine of millions of fish in other parts of the world, Laurie MacBride of the Georgia Strait Alliance told the inquiry.

Fish farm workers report that diseased fish are sometimes rushed through processing plants to get them to market before symptoms become visible, Ms. MacBride said. Another concern is the potential health risk when diseased fish are caught and handled by people.

Bacteria found on diseased fish can cause a variety of infections in humans ranging from diarrhea to necrotizing fasciitis (flesh-eating disease), Ms. MacBride said. In 1997, a team of Toronto doctors reported nine cases of *Streptococcus iniae* infection among plant workers who handled fish imported from U.S. farms.

Ms. MacBride urged that all farm salmon be labeled to allow consumers to make an informed choice when they purchase salmon.

B.C. farm salmon is approved by federal inspectors in Canada and the U.S. and is sold for higher prices on world markets than wild salmon, said Jim Anderson, former director of aquaculture for B.C. Mr. Anderson questioned the validity of human health concerns. He said farm salmon is eaten by millions of people who suffer no ill effects.

Farm fish often have higher fat content than wild fish, Dr. Warren Bell of the Canadian Association of Physicians for the Environment told the inquiry. Dr. Bell submitted a report that indicated Atlantic salmon raised in farms has about 50 per cent higher fat content than wild Atlantic salmon. Dr. Bell said the content of beneficial omega-3 fatty acids is significantly reduced in farm salmon and the content of less desirable omega-6 fatty acids is significantly enhanced.

Between 1997 and 1999, 0.4% to 1.1% of farm salmon tested in B.C. by the Canadian Food Inspection Agency showed drug residue above the minimum recommended level, said Dr. Sergio Paone. This was below comparable levels of tests in New Brunswick and Newfoundland, but still represents nearly 700 tonnes of farm salmon with elevated drug residue levels when extrapolated to the total B.C. production for those years.

## Alaska legislation banning finfish farming

### AS 16.40.210. Finfish Farming Prohibited.

- (a) A person may not grow or cultivate finfish in captivity or under positive control for commercial purposes.
- (b) This section does not restrict
- (1) the fishery rehabilitation, enhancement, or development activities of the department;
  - (2) the ability of a nonprofit corporation that holds a salmon hatchery permit under AS 16.10.400 to sell salmon returning from the natural water of the state, as authorized under AS 16.10.450, or surplus salmon eggs, as authorized under AS 16.10.420 and 16.10.450;
  - (3) rearing and sale of ornamental finfish for aquariums or ornamental ponds provided that the fish are not reared in or released into water of the state.



*Salmon farm net-cages on B.C.'s coast are a source of pollution, disease transfer and escapes of farm fish*

## CLEAR CHOICES, CLEAN WATERS

*The Leggatt Inquiry into Salmon Farming in British Columbia*

# Recommendations of the Leggatt Inquiry

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1. Remove all net-cage salmon farms from the marine environment by January 1, 2005.
2. Remove responsibility for promotion of aquaculture from the Department of Fisheries and Oceans; increase monitoring and regulation of salmon farming by government regulators.
3. Increase involvement of communities, especially First Nations, in consultation, partnership and ownership of salmon farming operations.
4. Maintain the moratorium on new farm sites with no further expansion at existing sites; complete and update the Salmon Aquaculture Review.
5. Apply the precautionary principle to regulation of the salmon farming industry.
6. Require labeling and identification of farm salmon at the consumer level.

### **1. Remove all net-cage salmon farms from the marine environment by January 1, 2005**

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Seldom do a series of complex problems point to a single, simple solution. But this appears to be the case regarding the major environmental issues involving B.C.'s salmon farming industry.

B.C. salmon farms are located in vast net cages floating in sheltered areas on the B.C. coast. Some are in wild salmon migration routes and many are close to food-gathering areas or other sensitive resources.

Escapes of farm fish, disease transfer and pollution that flows from these net cages to the surrounding marine systems are the root cause of most of the environmental damage attributed to the industry. This pollution appears to violate sections 34 and 35 of the federal Fisheries Act (Appendix C). The aquaculture industry also claims losses from wildlife such as seals and sea lions, toxic algae blooms and disease transfer from wild stock to farmed salmon.

Removing the net cages from B.C. waters and replacing them with a closed-loop containment system which prevents waste from being discharged into the environment will resolve most of these problems. Closed-loop containment, on land or at sea, isolates the salmon farm from the marine environment by replacing net cages with impermeable structures.

The industry has invested substantially in net-cage technology and must be given time to convert its operations. But we feel that this process must begin immediately and that conversion be subject to a regulated time-table. Farms in salmon migration routes or other sensitive areas should be converted to closed containment systems as a first priority and all salmon farms should be converted within three years.

This inquiry is not able to assess the various proposals for alternative methods of raising farm salmon. We are convinced that several alternative technologies show promise and we encourage the industry to assess which will adequately meet their needs and resolve these environmental conflicts.

The inquiry heard from two developers of alternative, experimental systems: AgriMarine Industries, which operates a land-based operation near Nanaimo and MariCulture Systems Inc., which is developing a floating closed-containment system in Washington State. The AgriMarine technology was approved under the B.C. Marine Pilot Project Technologies Initiative. Rick Luce of MariCulture Systems told the inquiry that although his company's solid-wall, closed-containment system involves higher capital costs, these initial costs can be more than offset by greater yields and higher returns.

We are encouraged that the six-member salmon aquaculture steering committee chaired by the B.C. Deputy Minister of Agriculture, Food and Fisheries listed consideration of alternative technology pilot projects as a primary task. Five pilot projects are currently being considered as part of the Salmon Aquaculture Policy Framework. We feel this program should be expanded to consider the MariCulture Systems technology and others. We urge the steering committee to move ahead and end net-cage salmon farming on the B.C. coast within three years.

## **2. Remove responsibility for promotion of aquaculture from the Department of Fisheries and Oceans; increase monitoring and regulation of salmon farming by government regulators**

---

The inquiry heard of inadequate monitoring and regulation of salmon farming. Witnesses said violations of the B.C. Waste Management Act and the federal Fisheries Act have been ignored by regulators for many years.

We agree with witnesses who maintain that DFO's promotion and support of aquaculture conflicts with its responsibility to protect wild salmon stocks. DFO must adopt the precautionary approach and give priority to wild salmon stocks, free of the conflicting responsibility of promoting the salmon farming industry.

Research by Leggatt inquiry staff indicated that while numerous charges have been laid against other interests, very few charges have been laid in recent years against salmon farm operators or their contractors for environmental violations.

Escapes and disease transfer are serious threats to wild Pacific salmon and should be treated as such. Pollution of marine waters by fish farm waste and improper disposal of dead farmed salmon should not be ignored. Regulators should effectively monitor the industry and enforce the laws designed to protect our resources and environment.

### **3. Increase involvement of communities, especially First Nations, in consultation, partnership and ownership of salmon farming operations**

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Greater involvement of local communities in issues such as location of salmon farms, waste discharge and escapes would reduce conflicts between operators and local residents. Joint-venturing with First Nations and other communities, based on higher environmental standards and recognition of aboriginal rights and local and traditional values, would further reduce or eliminate these conflicts. One of the best ways to build support for the industry is to involve the people who live in the communities where it operates.

The call for greater public involvement has come from many quarters including the Senate Fisheries Committee and the B.C. government's Salmon Aquaculture Review.

With the downturn in the salmon fishery, First Nations coastal communities urgently need new economic opportunities. As environmental standards are improved, First Nations must be consulted, must be involved in an ownership and equity position so that the economic benefits of salmon aquaculture can flow directly to these communities.

Some salmon farm operators have entered into agreements with First Nations. The inquiry was not told of the details of these agreements, but we are encouraged that First Nations are being involved beyond the level of employees or native liaison workers. The familiarity of First Nations with fisheries practices and the marine environment and most particularly, their aboriginal entitlement to territories where fish farms are located, provide ample reasons for further involvement.

Unfortunately, at this juncture First Nations involvement in the industry has created conflict with other First Nation communities that oppose salmon farming. If the industry operated in a responsible fashion, many of these conflicts and objections would be eliminated.

Co-venturing with non-native communities should be encouraged as well.

A sense of ownership in an industry that engenders pride in the community could turn opponents of salmon farming into proponents.

At the very least, local communities should be involved in meaningful consultation to avoid conflicts and hostility such as those engendered in the past when local interests were ignored.

We recommend that new forms of ownership styles be explored. Perhaps local fisheries cooperative associations for salmon farming would be appropriate. This recommendation requires further research. But a different organizational system which benefits local coastal communities, both native and non-native, is imperative.

#### **4. Maintain the moratorium on new farm sites with no further expansion at existing sites; complete and update the Salmon Aquaculture Review**

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The B.C. government imposed a moratorium on new salmon farm sites in 1995 pending resolution of various environmental issues. Many farms have expanded their capacity at existing sites during the moratorium.

The government instructed the Environmental Assessment Office to conduct a comprehensive public review of environmental issues and regulation. In 1997, the Salmon Aquaculture Review produced a report and 49 recommendations, but many of these have not been put in place. Many inquiry witnesses feel that industry expansion and new information require measures beyond the recommendations of the SAR.

Major environmental issues, including many of those outlined in this report, remain unresolved. It would not be prudent to lift the moratorium nor allow any further expansion until the industry makes significant progress on these issues at existing farm sites, including an end to net-cage salmon farming. Resolving these issues requires updating and completing the Salmon Aquaculture Review.

#### **5. Apply the precautionary principle to regulation of the salmon farming industry**

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The precautionary principle states that risks to the environment or human health should be managed despite the lack of scientific proof that damage has occurred or will occur. Regulators should err on the side of caution to protect important environmental values and human health.

The inquiry was told that Canada is committed to the precautionary principle through its signing of the Code of Conduct for Responsible Fisheries, which states that the absence of adequate scientific information should not be used to avoid taking conservation and management measures.

The inquiry heard ample evidence linking salmon farming to environmental damage on our coast. The threat of much greater damage is real and persistent. The inquiry feels the values and resources at stake are of great importance to British Columbia and that the precautionary approach should be applied to the regulation of the industry.

The precautionary approach is set out in the UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks. It requires the avoidance of changes that are not potentially reversible; steps to identify and take measures without delay; and the priority to conserve the productive capacity of the resource where the likely impact on a resource is uncertain.



## **6. Require labeling and identification of farm salmon at the consumer level**

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Farm salmon should be identified distinctly from wild salmon in retail outlets and restaurants so consumers can make informed choices about the products they purchase.

Some consumers may be concerned about drug residues in farm salmon or other health issues; others may want to avoid farm salmon for environmental reasons.

Farm salmon is currently labeled “fresh” or “Atlantic.” For many consumers, the relevant distinction is “farm” or “wild.” Mandatory labeling to identify farm salmon properly would allow consumers to make informed choices.

## Appendix A

### INQUIRY WITNESSES AND WRITTEN SUBMISSIONS

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#### *Witnesses*

#### **TOFINO – October 1**

1. Ben Williams, Councillor, Tla-o-qui-aht First Nation
2. Don Hall, Fisheries Program Manager, Nuu-chah-nulth Tribal Council
3. Dan Edwards
4. Darrel Campbell, Ahousaht First Nation
5. Joe Campbell, Ahousaht First Nation
6. Sid Sam Sr., Ahousaht First Nation
7. Rod Sam, Ahousaht First Nation
8. Valerie Langer, The Friends of Clayoquot Sound
9. Adrian Dorst, nature photographer
10. Sergio Paone
11. Nicole Gervais
12. Dorothy Baert, Tofino Sea-Kayaking Company
13. Didier Midavaine, tour operator
14. Steve Lawson, director, First Nations Environmental Network
15. Susanne Hare, co-chair, Canadian Environmental Network
16. Desirea Morgan
17. Krista Jorgenson
18. Bill Vernon, Creative Salmon Co. Ltd.
19. Elmer Frank, native liaison officer, Creative Salmon Co. Ltd.

#### **PORT HARDY – October 3**

20. Pat Alfred, President, Kwakiutl Territorial Fisheries Commission
21. Bruce Burrows, United Fishermen and Allied Workers' Union, Local 26
22. Carl Thomas, Quarterdeck Marine Industries
23. Jennifer Lash, Executive Director, Living Oceans Society
24. Bill Shephard, Director, Area 'D', Regional Economic Development Commission
25. Don Ford
26. Brenda Bower
27. Rick Milligan
28. Dale Dorward
29. Carmen Burrows, Malcolm Island Environmental Protection Society
30. Jeff Ardron, Director, Malcolm Island Environmental Protection Society
31. Mary Russell
32. Chris Bennett, Black Fish Lodge

#### **ALERT BAY – October 4**

33. Chief William Cranmer, Chairman, Musgamagw Tsawataineuk Tribal Council
34. Chief Willie Moon, Tsawataineuk Indian Band
35. Chief Percy Williams, Kwicksutaineuk Ahkwa'mis Tribes
36. Chief Charlie Williams, Gwawaenuk Tribe
37. Chief Robert Joseph, hereditary chief, Gwawaenuk Tribe
38. Greg Wadhams
39. Stan Hunt
40. Ed Dawson, liaison worker, Heritage Fish Farms
41. Alexandra Morton
42. Vera Newman
43. Michael Berry, R.P.Bio, Alby Systems Ltd.
44. Martin S. Weinstein, Ph.D., Aquatic Resources Coordinator
45. Art Dick, hereditary chief, Mamaleleqala, Village Island
46. Dale Peterson
47. Thane Alfred
48. Roy Cranmer
49. George Alfred, Vice President, Kwakiutl Fisheries Committee
50. Joseph Taylor
51. Mike Stadnyk
52. Chris Cook, President, Native Brotherhood of B.C.

#### **CAMPBELL RIVER – October 5**

53. Dan Smith, Hamatla Treaty Society
54. Wayne Jacob, marine biologist, Hamatla Treaty Society
55. Laurie MacBride, Executive Director, Georgia Strait Alliance
56. Alan Wilson, Wave Length Magazine
57. Terry Anderson, sport fisherman
58. David Boyes, M.Sc.
59. Robert Walker, AgriMarine Industries Inc.
60. Captain George (Quocksister) Kwakseestahla, Laichkwiltach Enterprises Ltd.
61. Ralph Keller, Coast Mountain Expeditions
62. Jim Roberts
63. Russell Kwakseestahla, Central Vancouver Island Native Fishers
64. Patrick Marshall, Rivercorp
65. Rick Hackinen, sport-fishing guide
66. Jim Mitchell, Sierra Club of Quadra Island
67. Robert Kreuziger
68. Eric Blueschke
69. Rod Burns, heritage interpreter
70. Van Egan
71. Claudia Lake

**VANCOUVER – October 9**

72. Dr. Rick Routledge, Director of Environmental Science, Undergraduate Program, Simon Fraser University
73. Ron MacLeod, director, Save Our Fish Foundation
74. Jim Anderson
75. Michael Akerly
76. Dr. Warren Bell, Canadian Association of Physicians for the Environment
77. Teresa Ryan
78. Simon Lucas, Co-Chair, B.C. Aboriginal Fisheries Commission
79. Jack Woodward, lawyer

**VANCOUVER – October 10**

80. Dr. John Volpe, Biological Sciences, University of Alberta
81. Dr. William Rees, School of Community & Regional Planning
82. Yvon Gesinghaus, Musgamagw Tsawataineuk Tribal Council
83. Douglas Massey
84. Edwin Newman
85. David Lane, T. Buck Suzuki Environmental Foundation
86. Tom Paterson
87. Dr. Michael Easton, International Broodstock Technologies Inc.
88. Karl Losken, Earth Save Canada
89. Ray Pillman, Outdoor Recreation Council of B.C.
90. Robert Corlett
91. Erling Olsen, President, Leader Fishing Ltd.

**VANCOUVER – October 11**

92. Dave Gaudet, Special Assistant to the Commissioner, Alaska Fish and Game
93. Lynn Hunter, Fisheries & Aquaculture Specialist, David Suzuki Foundation
94. Dale Kelly, United Fisherman of Alaska & Alaska Trollers Association
95. Cathy Scarfo, President, West Coast Troll Association
96. Paul George, Executive Director, Western Canada Wilderness Committee
97. Senator Emeritus Ray Perrault, former Vice-Chair, Senate Fisheries Committee
98. Adriane Carr, Leader, Green Party of B.C.
99. Bruce Turris, Executive Director, Canadian Sablefish Association
100. Robert Germyn, Heiltsuk Nation

**VANCOUVER – October 12**

101. John Fraser, Chairman, Pacific Fisheries Resource Conservation Council
102. Dr. Richard Stace-Smith, Director, Canada Marine Environment Protection Society

103. J.V. Van Slyke, Aerobic Thermophilic Digestion Waste Systems Inc.
104. John Henderson
105. Margot Daykin
106. Loys Maingon, research associate, Centre for Studies in Agriculture, Law & Environment
107. Rick Luce, Vice President, Sales & Marketing, MariCulture Systems Inc.
108. John Cummins, MP, Official Opposition Fisheries Critic
109. Don MacKenzie, Indigenous Business Magazine

***Written submissions***

1. Tom Stephens
2. John Hollingsworth
3. Ann Prendergast
4. Richard Michelson
5. Darlaene Eccleston
6. Garry Ullstrom
7. Klaus Gerharz
8. Susanne Shaw
9. Dave Nelson, Norkan Construction Ltd.
10. Tom Heller
11. Floyd Hawkins
12. Alan and Janet Davidson
13. Joyce Verkerk
14. Bruce Lloyd
15. Patricia Riley
16. Catherine Slater
17. Faye Smith, Qualicum Beach Streamkeepers Society
18. Ian Fleming, Coastal Oregon Marine Experiment Station, Oregon State University
19. Chris Campbell, Ph. D
20. H. Leslie Smith, P.Eng.
21. Josef Bauer Ltd.
22. Sandro Lane, President, Taku Smokeries/Fisheries
23. Daniel Kochli
24. C.C. Mills
25. Jim Levis, Chair, Alberni-Clayoquot Regional Fisheries Committee
26. Karl Smith, Fisheries Guardian, A-Tlegay Fisheries Society
27. Craig Orr, Executive Director, Watershed Watch Salmon Society
28. Loren Gerhard, Executive Director, Southeast Conference
29. Sharyl L. Brown
30. Gordon Clandening, Quadra Pacific Netloft
31. Rita Driver
32. Nathan Driver
33. Allister Marshall
34. Terry Moore
35. Peter Chettleburgh, Editor, Northern Aquaculture

*continued next page*

*Written Submissions, continued*

36. Kim Wright, Aquaculture Research Co-ordinator,  
David Suzuki Foundation
37. Karen G. Wristen
38. Professor Neil Frazer, School of Ocean & Earth Science  
& Technology University of Hawaii at Manoa
39. Lorraine Williams
40. Jeff Marliane, Vancouver Aquarium Science Centre
41. Astrid-Lynne Nilsson
42. Joan Sell
43. John Dafoe, Coastwise Guide
44. Linda McLaughlin
45. Dan Lewis, Rainforest Kayak Adventures
46. Stephen Miller
47. Sally Smith, Mayor, City/Borough of Juneau
48. Brent Rowe
49. Mr. Jack Holliston
50. Office of the Commissioner, State of Alaska,  
Department of Fish and Game
51. Devon Knight
52. Sarah Keeney, Water Quality/Mining Organizer,  
Southeast Alaska Conservation Council
53. Thomas D. Nicoll
54. Kathy Hansen, Executive Director, Southeast Alaska  
Fisherman's Alliance
55. Hamatla Treaty Society
56. Ross Campbell
57. Midori Nicolson, Stewardship Coordinator, Area 12  
Mainland Inlets Stewardship Group
58. Bill Proctor
59. Wesley Takahashi
60. J. Dumont
61. Peggy Wilson, Representative, Alaska State Legislature
62. Dorothy Childers, Executive Director, Alaska Marine  
Conservation Council
63. Senator Alan Austerman, Alaska State Legislature

## Appendix B

### AUDITOR GENERAL AND SENATE REPORTS

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#### *Auditor General's report*

The Auditor General's report was tabled in the House of Commons in February, 2001 following an audit of the Department of Fisheries and Oceans' Pacific salmon management programs. This report contends the department is not fully meeting its legislative obligations under the Fisheries Act to protect wild Pacific salmon stocks and habitat from the effects of salmon farming.

The Auditor General's report found that DFO is not adequately monitoring salmon farms for effects on wild salmon stocks and habitat with a view to enforcing the Fisheries Act; it found shortfalls in research and monitoring to assess the effects of salmon farming operations; and the lack of a formal plan for managing risks and for assessing the potential cumulative environmental effects of proposals for new sites, should the decision be made to expand the industry.

"In our opinion," the report stated, "the potential cumulative environmental effects of multiple salmon farm proposals warrant public review before a decision is made to lift the moratorium."

#### *Senate report*

The Senate Fisheries Committee issued a report in June, 2001 following a review of the Atlantic and Pacific aquaculture industries. Among the committee's recommendations were the following:

... that the Minister of the DFO give due consideration to the Department's legislative mandate for wild fish and fish habitat when responding to recommendations made by the Commissioner for Aquaculture Development.

On the issue of fish farm siting, the committee recommended:

a. the federal government promote the development of the aquaculture industry in those areas where the potential environmental risks are lowest, where there is community acceptance, and where the long-term economic benefits to coastal communities are reasonably assured;

b. grow-out sites for salmonid fish be prohibited near migratory routes as well as near rivers and streams that support wild salmon stocks;

c. when considering aquaculture lease site applications, government develop policies and measures to ensure that the decision-making process is open, transparent and fair. Ideally, local or municipal advisory committees – comprising a balanced cross-section of local interests and stakeholders – should be established to ensure full, meaningful and effective public participation and input in siting decisions; and

d. the possible economic opportunities of alternative uses of the shoreline be taken into account.

The committee recommended "public consultation with all users of aquatic marine resources" prior to implementation of the Commissioner for Aquaculture Development's action plan on aquaculture.

## Appendix C

### FEDERAL FISHERIES ACT, SECTIONS 34 AND 35

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#### *Fish Habitat Protection and Pollution Prevention*

##### Definitions

34. (1) For the purposes of sections 35 to 43,

“deleterious substance” means

(a) any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water, or

(b) any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water,

and without limiting the generality of the foregoing includes

(c) any substance or class of substances prescribed pursuant to paragraph (2)(a),

(d) any water that contains any substance or class of substances in a quantity or concentration that is equal to or in excess of a quantity or concentration prescribed in respect of that substance or class of substances pursuant to paragraph (2)(b), and

(e) any water that has been subjected to a treatment, process or change prescribed pursuant to paragraph

(2)(c);

“deposit” means any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing;

“fish habitat” means spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes;

“water frequented by fish” means Canadian fisheries waters.

Regulations for purpose of definition “deleterious substance”

(2) The Governor in Council may make regulations prescribing

(a) substances and classes of substances,

(b) quantities or concentrations of substances and classes of substances in water, and

(c) treatments, processes and changes of water for the purpose of paragraphs (c) to (e) of the definition “deleterious substance” in subsection (1).

R.S., c. F-14, s. 31; R.S., c. 17(1st Supp.), ss. 2, 3; 1976-77, c. 35, ss. 5, 7.

Harmful alteration, etc., of fish habitat

35. (1) No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.

Alteration, etc., authorized

(2) No person contravenes subsection (1) by causing the alteration, disruption or destruction of fish habitat by any means or under any conditions authorized by the Minister or under regulations made by the Governor in Council under this Act.

R.S., c. F-14, s. 31; R.S., c. 17(1st Supp.), s. 2; 1976-77, c. 35, s. 5.

## Appendix D

The following documents discussed in this report may be found on the Internet at the following sites:

*The federal Auditor General's report on the effects of salmon farming in British Columbia on the management of wild salmon stocks*

<http://www.oag-bvg.gc.ca/domino/reports.nsf/html/0030ce.html>

*The Senate Fisheries Committee report on Aquaculture in Canada's Atlantic and Pacific regions*

<http://www.parl.gc.ca/37/1/parlbus/commbus/senate/com-E/fish-e/rep-e/repintjunoi-e.htm>

*Report of the B.C. Government Salmon Aquaculture Review*

<http://www.eao.gov.bc.ca/PROJECT/AQUACULT/SALMON/Report/final/vol1/toc.htm>

*B.C. Government Salmon Aquaculture Policy Framework*

<http://www.bcfisheries.gov.bc.ca/com/aqua/finfish-sapinitiative.html>

*Federal Fisheries Act*

<http://laws.justice.gc.ca/en/F-14/52103.html>

*BC Salmon Farmers' Association economic impact reports*

<http://www.salmonfarmers.org/>

## Appendix E

### LETTERS TO PRIME MINISTER JEAN CHRETIEN AND PREMIER CAMPBELL

The  
**Leggatt Inquiry**  
into **Salmon Farming**  
in *British Columbia*

November 27<sup>th</sup>, 2001

The Right Honourable Jean Chretien  
Prime Minister  
House of Commons  
Ottawa, Ontario  
K1A 0E6

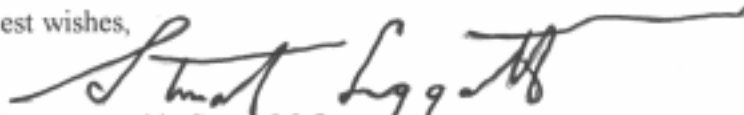
Dear Prime Minister,

Enclosed please find the *Leggatt Inquiry Report into Salmon Farming in British Columbia*. As the Commissioner charged with conducting a Citizen's Inquiry I travelled to four communities on Vancouver Island, and held four days of hearings in Vancouver. In total 109 witnesses appeared before me during the eight days of hearings. I also received written submissions from 63 people. I heard submissions from people who supported the finfish farm industry as well as those opposed to the industry. The evidence presented was very compelling and thorough.

I wish to draw your attention to the six recommendations contained at the end of my report. It is critical that First Nations be consulted, and that the terms of the special fiduciary relationship between the Crown and aboriginal peoples be recognized as outlined by the Supreme Court of Canada. We recommend that the moratorium on new farm sites be maintained, for now, and the precautionary principle applied to the regulation of the salmon farming industry. Perhaps the easiest recommendation to implement is the final one requiring proper labelling and identification of farmed salmon for consumers.

I sincerely hope that my report will receive your full consideration and attention.

Best wishes,



The Honourable Stuart M. Leggatt

PO Box 72065  
4479 W 10th Avenue  
Vancouver, BC V6R 4P2  
P. 604-721-1536  
info@leggattinquiry.com  
www.leggattinquiry.com



The  
**Leggatt Inquiry**  
into **Salmon Farming**  
*in British Columbia*

November 27<sup>th</sup>, 2001

Premier Gordon Campbell  
Parliament Buildings  
Victoria, BC  
V8V 1X4

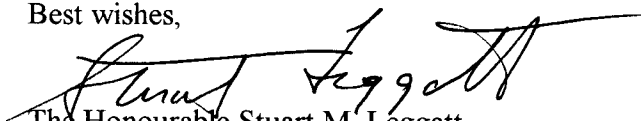
Dear Premier Campbell,

Enclosed please find the *Leggatt Inquiry Report into Salmon Farming in British Columbia*. As the Commissioner charged with conducting a Citizen's Inquiry I travelled to four communities on Vancouver Island, and held four days of hearings in Vancouver. 109 witnesses appeared before me during the eight days of hearings, and I received written submissions from 63 people. I heard testimony from people who supported the finfish farm industry as well as those opposed to the industry. The evidence presented was very compelling and thorough.

I wish to draw your attention to the six recommendations contained at the end of my report. These recommendations address the major environmental issues arising from the salmon farming industry. It is critical that First Nations be consulted, and that their voices be heard concerning the salmon aquaculture industry in their territories. The moratorium on new farm sites must be maintained, and the precautionary principle applied to the regulation of the salmon farming industry. Perhaps the easiest recommendation to implement is the final one requiring proper labelling and identification of farmed salmon for consumers.

I sincerely hope that my report will receive your full consideration and attention.

Best wishes,



The Honourable Stuart M. Leggatt

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*“It’s time to get on with the job:  
cleaning up the environmental degradation  
left behind by the salmon farming industry,  
preventing further damage and  
involving residents in this process  
and the future direction of the industry.”*

STUART M. LEGGATT, COMMISSIONER