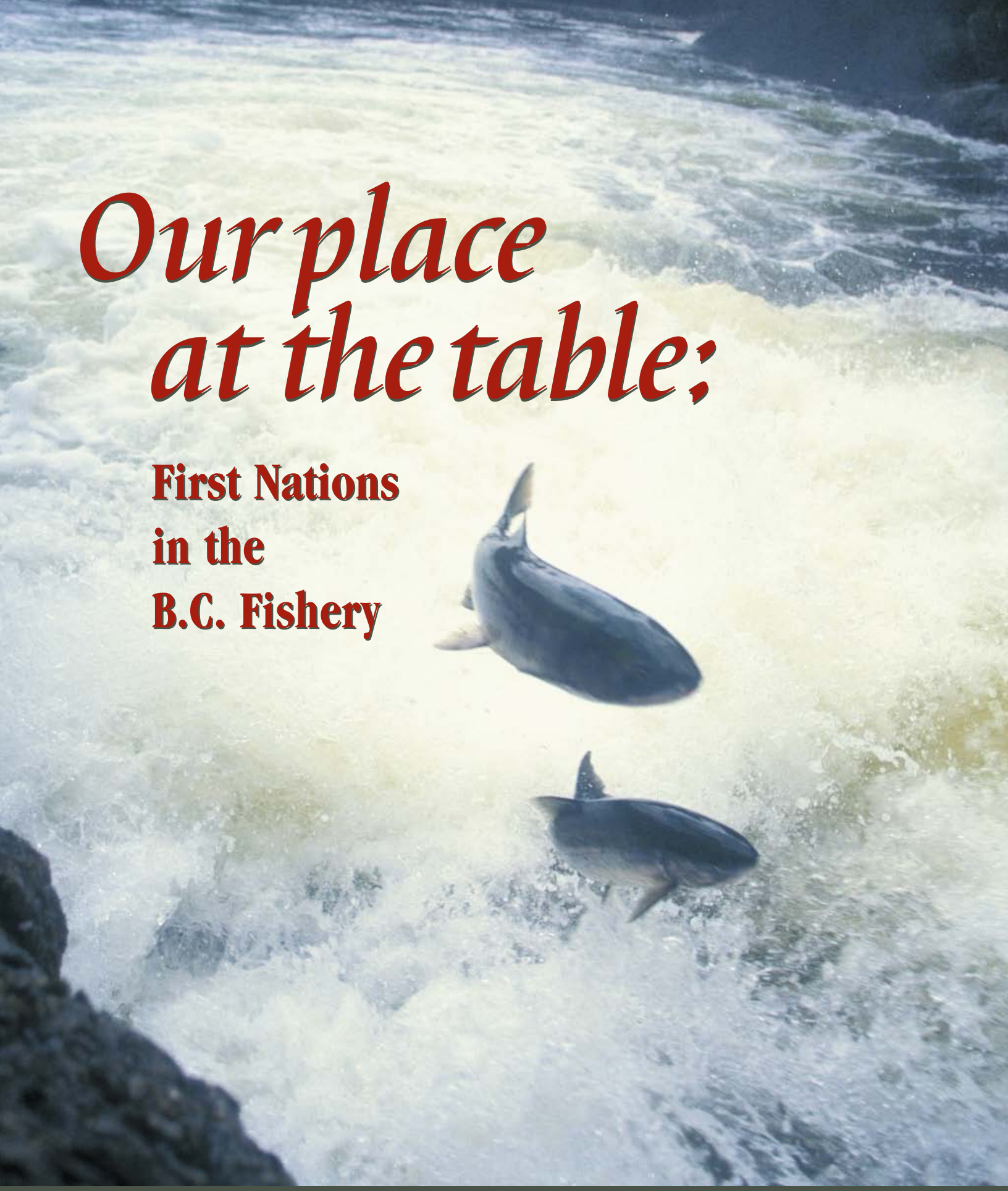


Our place at the table:

First Nations in the B.C. Fishery

A REPORT BY THE FIRST NATION PANEL ON FISHERIES

Acknowledgements

The First Nation Panel on Fisheries owes its heartfelt thanks to the many individuals who assisted us in the preparation of this report. Foremost in our appreciation are the many First Nations leaders, fisheries managers and individuals who at short notice took the time to prepare reports and presentations, attend our hearings and share their concerns.

Next are the various technical and professional persons who not only responded to our requests for assistance with various aspects of this report, but also offered constructive criticism. We are indebted to a long list of people including: Edwin Blewett, Hugh Braker, Andrew Day, Richard Erhardt, Karl English, Stacey Edzerza Fox, Wayne Fullerton, Brenda Gaertner, Rick Krehbiel, Byron Louis, Dave Peacock, Robin Tamasi and Howie Wright.

We also acknowledge individuals at the Pacific Salmon Commission, the Province of B.C., the Department of Fisheries and Oceans and the Pacific Fisheries Resource Conservation Council who provided information and data to the Panel and various technicians and professionals who assisted us.

James Anderson, the Northwest Indian Fisheries Commission's Executive Director, went out of his way to review part of the report and to comment on it. He also provided the Panel with background information on the NWIFC and the Judge Boldt decision. We appreciate his generosity.

At short notice, and in the midst of one of the busiest times of the year for those who work with aboriginal people, Mike Staley and Don Hall provided advice and coordinated technical aspects of this report. We are grateful to them.

Ben Parfitt assisted the Panel with the challenge of bringing the various parts of the report together with calm under challenging timelines and conditions. We deeply appreciate his help.

Finally, Panel coordinator Angela Wesley embraced the challenge of organizing the Panel hearings along with a myriad of other tasks with professional calm and dignity. We cannot thank her enough.

While many assisted us with this report, we alone are responsible for any mistakes or errors.

Russ Jones, Marcel Shepert, Neil J. Sterritt
Vancouver, May 2004

TABLE OF CONTENTS

A Note on Figures

There are many figures in this report too numerous to mention in this brief Table of Contents. The majority of them are found in the Background Section of the report, particularly in the Overview of B.C. Fisheries, which begins on page 18. The figures provide an easy and timely resource to various present-day fisheries allocations.

Executive Summary

FISHERIES HAVE REACHED A CRITICAL JUNCTURE IN BRITISH COLUMBIA, particularly with regard to First Nations and their legal rights to fisheries resources. Dramatic changes took place in the management and allocation of B.C. fisheries over little more than a century – from well-adapted, exclusive First Nation fisheries, to highly developed fisheries with an array of users. There are major uncertainties for aboriginal and non-aboriginal fishers in the fishery today. These include a B.C. treaty process that promises increased access to First Nations in fisheries. While several Agreements-in-Principle are in place, the process has been slow to deliver benefits to most First Nations. At the same time, although many B.C. fisheries are healthy, the economic viability and sustainability of others is in question. The B.C. salmon fishery, for example, is not providing a reasonable living to most fishers.

This report lays out solutions and recommendations aimed at bringing a high degree of certainty to aboriginal and non-aboriginal interests alike while ensuring the conservation of fisheries resources. Following is a brief description of each section of the report.

Introduction

The First Nation Panel on Fisheries was appointed by a steering committee made up of leaders of the First Nations Summit and B.C. Aboriginal Fisheries Commission in January 2004. The Panel was asked to articulate a vision for future fisheries management and allocation and to identify what principles would help to achieve that vision. The Panel was also asked to describe a workable framework for management that would provide some certainty to users in terms of access and use of fisheries resources.

Background

Section 2 draws on information from a variety of sources and is grounded in workable solutions. We were informed by a legal analysis of aboriginal rights to fisheries and an overview of B.C. fisheries. This section also includes case studies in B.C. and other jurisdictions where significant reallocations of fisheries and management responsibilities to aboriginal people have occurred. The legal analysis provides a foundation for greater First Nation involvement in fisheries management and allocation based on aboriginal title and rights. While many First Nations are involved in the B.C. treaty process, others are not, and a few are initiating litigation concerning their title and rights relating to the fishery. A major problem with regard to the B.C. treaty process is Canada's mandate regarding First Nations economic access to the fishery. Elsewhere, certainty has been provided by resolving allocation disputes through legal or political channels as demonstrated in several case studies.

What We Heard

The Panel held public hearings in seven First Nation communities in February and March 2004 at Kamloops, Prince Rupert, Smithers, Prince George, Fort Rupert,

Nanaimo and Chilliwack. As summarized in Section 3, participants described a range of issues and concerns with regard to fisheries, including a lack of fish for food, social and ceremonial purposes, insufficient economic benefits from fisheries, and the need to be more involved in fisheries management.

Our Vision for B.C. Fisheries

Section 4 describes the Panel's vision for B.C. fisheries and puts forward a number of principles for management and allocation. The vision focuses on healthy ecosystems and species and equitable sharing of fisheries resources for aboriginal and non-aboriginal people alike.

The principles include:

- an ecosystem approach to management,
- conservation as a priority, including a precautionary approach to management,
- sustainability as measured by the availability of fisheries resources for future generations,
- shared responsibilities, including a primary responsibility for First Nations, Federal and Provincial governments,
- accountability of fisheries managers, and
- diverse benefits and approaches that would accommodate the varied needs of First Nations, rural communities and others.

Allocation principles are based on the following premises: that aquatic species and their habitat are held in trust by governments and not privately owned; that we have the responsibility to treat aquatic species and their habitat with respect; and that we need to have clear sharing arrangements. Allocation objectives in order of priority include healthy species, habitats and ecosystems; First Nations' aboriginal and treaty rights; followed by commercial and recreational needs.

New or reformed institutions for fisheries management are required that have delegated authority, clear roles and responsibilities and stable sources of funding. They should include area-based bodies that provide a strong and clear framework for integrating First Nations, Federal, Provincial and local government jurisdictions and authority; an umbrella body or bodies that address broader jurisdictions, coast-wide or regionally and whose objective is to coordinate the efforts of area-based bodies. An independent science institution is needed that operates at regional and coast-wide levels. Finally, an independent, arms-length allocation and arbitration body is needed that works with area, regional and coast-wide forums.

Certainty in the fishery will not be achieved without a reallocation of fish for economic purposes to First Nations. We are recommending that a minimum of 50 per cent of all fish over and above First Nations food, social and ceremonial requirements be reallocated to First Nations. This is an interim step that attempts to reconcile aboriginal and Crown title. As aboriginal title is the underlying title, then putting it on a more equal footing is a justified step.

Management & Allocation Options

The Panel considered various management and allocation options. *Status quo* approaches do not adequately address aboriginal and treaty rights in the fisheries. Management and allocation options need to begin the reconciliation of aboriginal and Crown interests in the fishery.

MANAGEMENT OPTIONS

In terms of management, a key issue is how First Nations will participate in decision-making processes relating to migratory fish stocks that are shared with other First Nations. The Panel focused in particular on the need to formalize and support a three-tier process identified by aboriginal leaders about a decade ago. Tier 1 of the three-tier process involves discussions and organizational relationships among First Nations only. Tier 2 involves First Nations and the Federal government, and Tier 3 involves First Nations, the Federal and Provincial governments and third parties. This type of process can assist First Nations, Canada and B.C. but it is unlikely to be established unless there are incentives such as increased First Nation access to commercial fisheries.

There are working examples of Tier 1, 2 and 3 processes, including the Northwest Indian Fisheries Commission in Washington State, the Joint Technical Committee established under the Nisga'a Final Agreement and the West Coast Vancouver Island Aquatic Management Board, respectively.

A fully functioning and effective Tier 1 process will contribute to the success of Tiers 2 and 3. The onus here is not just on the Federal and Provincial governments. It is incumbent on First Nations themselves to establish truly effective governance and communications systems amongst themselves. Such processes must develop from the ground up if First Nations are to be committed to the process. The Panel therefore believes that individual First Nations and interested groups of First Nations must have the resources that enable them to properly plan and execute their management and allocation of fish, and that these are developed well in advance of fishing seasons. One way of dealing with this would be to require that all First Nations within a given region to have concluded catch plans in advance of fishing seasons or no one in that system takes fish. This would not apply to food, social and ceremonial requirements. A mediation process could deal with issues that could not otherwise be resolved.

An effective Tier 2 process adds order and structure to First Nations discussions with government. Tier 2 discussions are essential because of the fiduciary relationship between aboriginal people and government and the duty of government consultation about actions that may infringe aboriginal or treaty rights.

Finally, the advantage of an effective Tier 3 process is the greater legitimacy given to decisions arising from the process.

ALLOCATION OPTIONS

The Panel is not recommending a single approach to allocation because different allocation options may be more appropriate for different species or fisheries or First Nations. A variety of allocation options was considered for First Nations, including community quotas, an exclusive fishing area, fishing using usual and accustomed means without a fixed allocation, a fixed quota, and a percentage share of the allowable catch for a stock.

IMPLEMENTATION ISSUES

The Panel recommends significant fish transfers to First Nations and a shift in management and decision-making from coast-wide to local processes. In doing so, the Panel considered a number of implications.

Reallocations must be large enough to contribute certainty in fisheries. This will be a step towards resolution of aboriginal rights and claims as well as an opportunity to strengthen the BC economy and improve the circumstances of B.C.'s first peoples.

The value of all B.C. licences and quota is estimated to be about $1.8 billion. Transfer of half that amount ($900 million) to First Nation fisheries access would lead to stability and certainty in the fishery. While this may be portrayed by some individuals and organizations as too high a price to pay, it represents less than one year's production by the B.C. seafood industry, which generates about $1.04 billion annually. Transfers can take place through a buyback of commercial licences from willing sellers similar to the recent Mifflin Plan reduction of the B.C. salmon fleet.

Even if this reallocation was accomplished, it is only the first step in creating economically viable First Nation fisheries. Developing First Nations fisheries will be subject to the same pressures that other fisheries have experienced including too many fishers and overinvestment in boats and equipment unless this is controlled from the start. But there are also opportunities to develop value-added industries that provide more local benefits.

It will be important not to undo previous efforts to maintain First Nation participation in fisheries. One approach to this issue would be to set a goal of not disproportionately reducing First Nation participation in a particular fishery as was done in the most recent Mifflin Plan buyback.

Individual Fishing Quotas (IFQs) have proven a useful management tool in some B.C. fisheries. Individual Vessel Quotas or IVQs, which are a form of IFQ, have been suggested for other fisheries such as salmon and rockfish. However, this approach will increase the cost of fisheries settlements in treaties. For that reason the Panel recommends that there be a moratorium on new IFQ programs unless First Nation interests in those fisheries – including allocations – are first addressed. If IFQs are considered then issues of initial allocation, transferability and accumulation of shares should also be given careful consideration.

We next turn to the salmon and halibut fisheries to consider how the Panel's vision might be implemented.

B.C. salmon fisheries have undergone dramatic changes in the way they are managed over the past decade. Changes have occurred to conserve less productive salmon stocks and to protect salmon populations that are at risk of disappearance. The vision is for a further shift in emphasis as to where fish are caught – from interception mixed-stock fisheries towards terminal fisheries. Positive results of such changes will include a higher abundance of wild salmon stocks and more resilience to threats such as climate change. A challenge for First Nations will be to develop fisheries that are profitable and that improve the economic and social well being of their members.

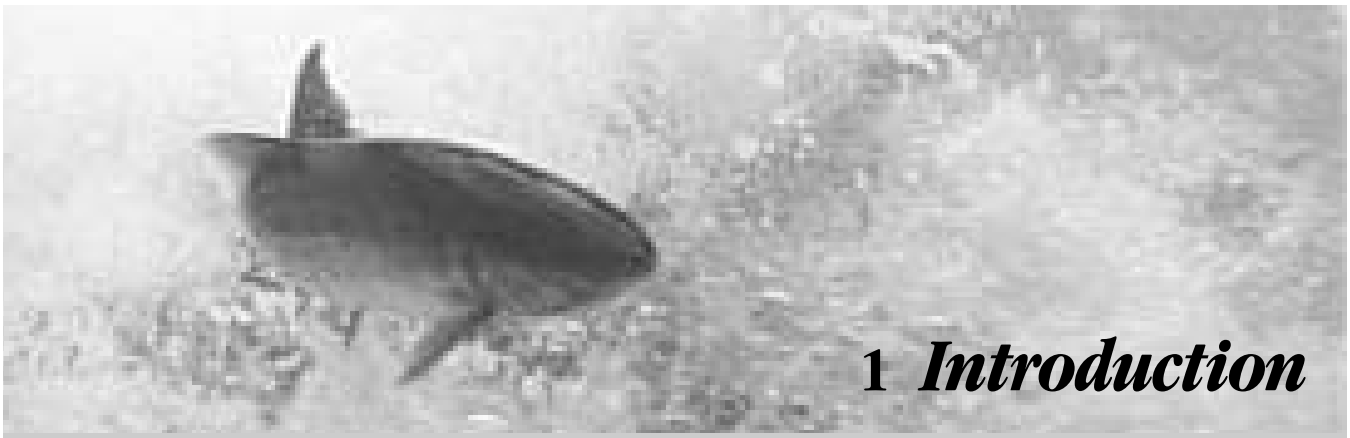
The halibut fishery is an existing IVQ fishery and transfers of catch shares to First Nations would be easy to accomplish. The only difference from the Panel's point of view is that shares would be held communally by First Nations instead of by individuals or companies. Transfers of quotas or quota shares to First Nations would have little impact on the way the fishery is currently managed. An obvious barrier to transfers of halibut will be the recent increases in cost of quota.

Recommendations

The following recommendations from the Panel are informed by the views of a wide range of First Nations people with longstanding interest in fisheries. They should guide Federal, Provincial and First Nation governments in future deliberations on the makeup of fisheries in a post-treaty or post-negotiation environment. These recommendations are directed at Canada. However, some are relevant to British Columbia because of its role in the B.C. treaty process and its delegated responsibility for freshwater fisheries.

The recommendations are:

- Canada must immediately take steps to ensure that First Nations have access to adequate quantities of fisheries resources for food, social and ceremonial purposes.
- As a starting point and as an interim measure, Canada take immediate steps to allocate to First Nations a minimum 50 per cent share of all fisheries, with the understanding that this may eventually reach 100 per cent in some fisheries.
- First Nations themselves must address intertribal allocations.
- Canada immediately increase treaty settlement funds, or funds through other negotiating processes, to enable purchase or buy-back of licences and allow for the reallocation recommended above.
- Canada immediately recognize in policy, and implement through negotiated agreements, the aboriginal right to manage fisheries.
- Canada clearly articulate how it will provide fisheries resources for First Nations commercial benefit, in light of the uncertainty created by the *Kapp* decision and the loss of pilot sales.
- A moratorium be placed on the further introduction of individual property rights regimes such as Individual Fishing Quotas (IFQs) unless First Nation interests including allocations in those fisheries are first addressed.



1 *Introduction*

IN LATE JULY 2003 THE GOVERNMENTS OF CANADA AND BRITISH COLUMBIA jointly announced the creation of a task group to advise them on "vital issues relating to the fishery" in a post-treaty era.

"Both governments have a mutual interest in ensuring a viable post-treaty fishery," B.C. Attorney General Geoff Plant explained in a press release on July 29, 2003. "We need to work co-operatively to achieve greater certainty for fisheries arrangements in a way that supports treaty settlements and creates new economic opportunities."

Most First Nations in B.C. would probably agree with Mr. Plant's assertion. However, how such fisheries are designed and in what manner they benefit First Nations now and in the future are difficult questions to answer. And the answers will not be reached without First Nations playing a central role.

For First Nations in B.C., a central concern with the task group was that it evolved without any input from First Nations. Moreover, no First Nation leader was appointed to it. In fact, only two task group members were named – Donald McRae, a professor of law at the University of Ottawa and Peter Pearse, an economist and Professor Emeritus at the University of British Columbia. How was the task group to come up with reasonable proposals on the makeup and management of fisheries in a "post-treaty era" if the party most affected by treaty talks – First Nations – was not at the table?

The task group's appointment, coming as it did one day after the Provincial Court of British Columbia's release of the decision in *R vs. Kapp,* also raised alarm bells within B.C.'s aboriginal leadership. The highly contentious *Kapp* decision, under appeal by the Government of Canada, stated that First Nation Pilot Sales fisheries on the West Coast were inconsistent with Section 15 of the *Canadian Charter of Rights and Freedoms.*

In light of the fact that First Nations were not consulted by the Canadian and B.C. governments prior to the naming of the task group, the B.C. First Nations Summit and the B.C. Aboriginal Fisheries Commission lobbied for funding of a parallel process.

After much delay, the federal government agreed to that request late in 2003 and the First Nation Panel on Fisheries was appointed. The Panel subsequently considered fisheries issues over a wide geographical area including B.C.'s two most important salmon producing rivers systems – the Fraser and the Skeena – the Coast, transboundary rivers in the north of the province (the Stikine and Taku) and in the south in the transboundary Columbia River, whose upper tributaries stretch well into B.C. *(See map on page 42.)*

The Panel was asked to articulate a vision for future fisheries management and allocation and to identify what principles would help to achieve that vision. It also sought to describe a workable framework for management that would provide some certainty to users in terms of access and use of fisheries resources.

The First Nation Panel on Fisheries consisted of three people who were jointly appointed by a steering committee of six leaders, three each from the BC First Nations Summit and the BC Aboriginal Fisheries Commission. The Panel acted independently of both organizations.

The Panel members were Russ Jones, a fisheries consultant and advisor with experience in fisheries on local and international levels. Mr. Jones lives in Skidegate on Haida Gwaii. Marcel Shepert, executive director of the Fraser Watershed Fisheries Secretariat and a fisheries program manager and coordinator for the Carrier Sekani Tribal Council. Mr. Shepert lives in Prince George. And Neil Sterritt, a consultant specializing in a range of aboriginal and indigenous issues in Canada and overseas. Mr. Sterritt lives in Hazelton.

In preparing its report, the Panel held public meetings between February and March 2004 in Kamloops, Prince Rupert, Smithers, Prince George, Fort Rupert, Nanaimo and Chilliwack. Dozens of First Nation leaders, members and advisors appeared at the meetings. In addition, 43 written and 11 verbal submissions were received and considered by Panel members. Appendix A of this report includes a list of people attending the Panel hearings and those making written submissions to the Panel.

Specifically, people appearing before the Panel were asked to comment on five questions.

- What are the main issues for First Nations in the fishery today in your area?
- What are the main obstacles to First Nations reaching agreements with Canada, including B.C., on fisheries allocations?
- How should fish stocks that are caught by more than one First Nation group be shared among First Nations and between First Nations and recreational and commercial interests?
- How are you or your First Nation currently involved in the fisheries management of both your own fishery and the overall resource? What is your vision for the future of management? How might it work? And what do you need to attain it?
- What do you see as the role of the fishery in sustaining your community in the future: culturally, socially and/or economically?

In addition to getting answers to these questions which are critical to any credible articulation of fisheries policies in a post treaty environment or otherwise, the First Nation Panel on Fisheries also commissioned a number of people to provide detailed information on different issues of importance. These included but were not limited to:

- an analysis of the case law surrounding aboriginal rights to fish,
- an analysis of treaties and other processes and outcomes relating to fisheries allocation and management,
- analyses of situations in other jurisdictions where significant reallocations of fisheries resources have occurred in an effort to resolve outstanding issues respecting aboriginal and treaty rights to fish and the sharing of fisheries resources,
- analysis of various fisheries in different parts of B.C., and
- data collection on the catch and value of specific fisheries in the province today.

These efforts and others guided the Panel in its deliberations and the preparation of this report.

Overall, the Panel found that there are mixed prospects for First Nations and fisheries in the years ahead in part because certain stocks of fish are experiencing problems that will not be easily rectified. Also, there is great uncertainty within First Nation communities about the treaty process and other negotiations and their ability to adequately address fisheries management and allocation issues. Uncertainty also exists in the business community, and with the provincial and Canadian governments. The Panel concludes that the major issues affecting the B.C. fishery need to be dealt with in a decisive manner. This requires major changes and adjustments. First a significant transfer of access of fisheries resources to First Nations is necessary; second a more flexible fishery management framework that accommodates First Nations' interests. These changes will take time to implement but they will provide much-needed certainty. It is better to take decisive action now than to spend another decade or more waiting for the courts to decide or for treaties to conclude.

The rest of the Panel's report is divided into the following five parts.

- Section 2 addresses an array of topics including traditional fisheries, aboriginal rights to fisheries, Canadian fisheries development and policies, the treaty process and implementation, and an overview of the major B.C. fisheries. It also provides compelling examples of dramatic shifts in fisheries management and allocation both in B.C. and in other jurisdictions, most notably Washington State and New Zealand, where aboriginal people now participate more fully in decisions affecting their lives and share much more in the riches of the ocean and freshwater.
- Section 3 presents readers with an overview of the variety of perspectives and sentiments expressed to the Panel during its hearings and in the many written submissions received. As the Panel reviewed that material, it came to see that there were nine major areas of shared concern. They were: food and societal access to fisheries, aboriginal rights to fisheries, economic access, government policies and programs, licensing and quota systems, recreational fisheries and tourism, habitat, ecosystems and local stewardship of fisheries resources, fisheries management, and treaty issues.
- Sections 4 and 5 provide the context for understanding the recommendations that come after. These sections are concerned with a vision for the fishery and management and allocation options. Section 5 provides concrete examples of how fisheries management and allocation decisions are working or hold the promise of working for First Nations.
- Section 6 concludes with the seven recommendations described above and the reasoning for them. It is hoped that the recommendations and other sections of this report, along with the work of Professor McRae and Professor Pearse, will help guide the Canadian and British Columbian governments in their fisheries decisions and relations with First Nations in the months ahead.

2 *Background*

Since Time Immemorial: Aboriginal Fisheries

FOR THOUSANDS OF YEARS, FIRST NATIONS IN PRESENT-DAY BRITISH COLUMBIA have relied on the riches of the ocean and freshwater for food, social, ceremonial and economic purposes.

Not only did they catch huge numbers of salmon, halibut, herring, oolichan, a wide array of shellfish and other species, but also they did so in ways that ensured nature's bounty was there from generation to generation to generation.

It is no exaggeration to say that the many First Nations lived in balance with these resources. Significantly, they did so in the not too distant past with populations that well exceeded present-day levels (the current baby boom in many First Nation communities still having some way to go to before numbers approach pre-contact levels). And they caught far more fish then than they do now. There are lessons here for everyone. As history shows, past fishing efforts were very intensive, yet highly selective. Such could be the case again, with the natural wealth of oceans, lakes, rivers and streams spread generously and equitably around, to the benefit of First Nations people and non-aboriginals alike.

As today's First Nation populations continue to rise, as new efforts are made to allocate fisheries to First Nations through treaty negotiations and other processes, the lessons of the past should never be far from our minds.

It is not the purpose of this report to spend much time recounting traditional fisheries and their relevance to today. But a few short paragraphs are devoted to two such fisheries – one in the Interior, the other on the Coast – in order to give the reader a taste for just what traditional fisheries were all about. Short descriptions of fisheries in the traditional territory of the Lake Babine Nation or Nato'oten Nation and the Cowichan Nations, are then followed by a short outline of present-day law on First Nation fishing rights.

NATO'OTEN NATION

On Babine Lake, members of the Nato'oten Nation fished on the largest natural lake in the province, a lake system rich in sockeye salmon. Evidence exists of a longstanding practice of catching fish in weirs in shallow waters, generally at the mouths of certain tributaries during August and September. Fish caught were used for food as well as a valuable trade item that the Nation exchanged with neighbouring First Nations, particularly those peoples to the east on Stuart Lake and Takla Lake in the Fraser watershed where the local sockeye runs were less reliable.

Nato'oten fishing sites were traditionally regarded as a form of property. This remains the case today with certain families retaining a degree of exclusive fishing rights at specific places. It was the responsibility of chiefs to allocate individual fishing sites along the weirs, and the times and the order in which clan members were allowed to fish.

Indian Agent, R.E. Loring, noted in 1905 that there was a high degree of organization to such fisheries, and that fishing activities were carefully timed, an indication that the First Nation fished in a manner that ensured large numbers of fish were caught and that sufficient numbers were able to spawn.

"Many times before and after fishing, also during the curing of salmon have I been below that point [the weirs at the outflow of Nilkitkwa Lake in the Skeena catchment area] with only here and there a post found standing to indicate the locality. The Indians did not at any time go fishing until 3 or 4 weeks after the salmon had begun going into the lake," Loring observed.

COWICHAN NATION

The story of the Cowichan People, far to the south of the Nato'oten Nation, is remarkably similar in certain details. Like the Nato'oten Nation, members of the Cowichan Tribes built weirs at established locations along the Cowichan River in the spring and fall. Their chiefs directed them on where to place the weirs.

In addition to weir fisheries, in June or July, members of the Cowichan Tribes would cross the Strait of Georgia and set up camp at a summer village near the mouth of the Fraser River where they caught and dried sockeye salmon.

"Our oral history tells the story of Syalustsa, one of the first people to fall from the sky. He sacrificed his baby girl so that the salmon would spawn in the Cowichan River and provide our people with food forever," Chief Harvey Alphonse told members of the Panel during a day of hearings in Nanaimo. "All Cowichan are descendants of Syalustsa and the other 11 people who fell from the sky, and because of this we have a right to the salmon."

All manner of other First Nations in present-day British Columbia have similar stories that point to the integral role salmon and other fisheries resources played in the lives of their communities and the prosperity of their people. Their rights and interests to those resources remain as strong today as they were in the past. And, what is more, those rights are legally protected.

2.1 Canadian Law and First Nation Fishing Rights

The following section is a brief overview of the legal rights First Nations have to fisheries as protected in Section 35 of the Canadian *Constitution Act 1982.* The overview is part of a larger legal analysis commissioned by the Panel. The analysis shows that there is a solid legal foundation for First Nations fishery rights extending to jurisdiction over fisheries resources and their management. This includes participation in important decisions regarding allocations and the benefits derived from them. The analysis draws on several decisions that interpreted First Nation rights based on Section 35 arguments. The text of the full analysis is available for a nominal copying fee from the offices of the B.C. Aboriginal Fisheries Commission.

ABORIGINAL TITLE

In *Delgamuukw,* aboriginal title was defined as a *sui generis* collective property interest. Aboriginal title burdens Crown title and, therefore, there is a need to reconcile the prior occupation of the land by aboriginal peoples with the assertion of Crown sovereignty. Three aspects of Aboriginal title are particularly relevant to First Nations fishery rights:

- the right to choose what uses land can be put to is a foundation for First Nations jurisdiction, including stewardship responsibilities and ecosystem based management; where land, according to the legal definition, could extend to the river and ocean;
- the right to exclusive use and occupation—reflected in the principle of aboriginal priority—means that the Crown must demonstrate that both the process by which a resource is allocated and its actual allocation reflect that priority. Consultation and accommodation is required to respect this priority; and
- the inescapable economic component: First Nations are entitled to share in the benefits from the fisheries regardless of whether First Nations or others are engaged in catching the resource. First Nations have a legal right to access and use of the land and resources within their territory. Compensation is required where there is infringement.

ABORIGINAL RIGHTS

To establish an aboriginal fishing right —apart from aboriginal title—Courts ask whether the right in issue is an integral part of the distinctive culture of the First Nation in question. Within this context, a number of specific aboriginal fishing rights arising from the facts raised in various cases have been recognized by the Courts.

- **Right to fish for food, social and ceremonial purposes:** In *R. v. Sparrow* (the Sparrow decision), the right to fish for individual and community food, social and ceremonial purposes was found to exist, and to have priority after conservation goals are met.
- **Right to fish for economic purposes:** In three 1996 commercial rights cases *R. v. Gladstone, R. v. Van der Peet and R. v. NTC Smokehouse,* the Supreme Court of Canada confirmed the aboriginal right to fish for economic purposes. Such a purpose might be for sale or trade. The case law remains uncertain on how broadly this right will be defined. To date, this right has been found to exist in the *Gladstone* decision. In *Gladstone,* trade was deemed to be integral to the distinctive aboriginal culture before contact.
- **Protection and management of fisheries and aboriginal priority:** While the case law is limited, the courts have utilized the principle of aboriginal priority to address the aboriginal right to manage and protect fisheries resources and habitat.
- **Site Specific Rights:** Where the occupation and use of land (including fishing sites) may not be sufficient to support a claim of aboriginal title, if the practice or activity is tied to a specific place a right may exist to engage in a fishery at that place.

IMPLICATIONS

The spectrum of Section 35-protected aboriginal rights confirmed by Canadian courts established the legal foundation for direct participation by First Nations in the protection, management, allocation and benefits of fisheries resources within their territories. A willingness to change the status quo and engage in meaningful consultations that address and accommodate aboriginal and treaty rights is necessary to begin making the required changes that will result in the reconciliation of aboriginal and Crown interests that section 35 is intended to achieve.

SUMMARY

Aboriginal title includes First Nations' jurisdiction over a range of fisheries issues, including management and allocation of resources. How jurisdiction will be exercised depends upon honorable good-faith negotiations between the Crown and First Nations. Several factors will influence the outcome of negotiations, including future legal decisions, the community vision and development of First Nations, and the Crown's fulfillment of its fiduciary obligations.

A legal foundation exists for First Nations to pursue management and conservation schemes in consultation with the Crown and, if necessary, in the courts. Such a scheme would reflect aboriginal values and practices; seek reparation and mitigation for past and on-going impacts; and provide for First Nations' and Crown participation to determine the appropriate levels of resource use and management. As holders of the underlying aboriginal title, First Nations must be involved in the management and allocation of fisheries within their territories.

2.2 Canadian Fisheries Development and Policy

Management of Canada's Pacific fisheries has changed significantly in the past few decades. Pacific salmon fisheries have been restructured. Individual Fishing Quotas (IFQs) have been put in place for many fisheries. Accommodation of aboriginal rights has become a legal requirement. Recreational fisheries have grown in prominence. World aquaculture production has become a major source of seafood that is affecting markets for wild fish and in some cases the direct well being of wild stocks. And, as ecosystems are being taxed to their limits, fisheries management has necessarily begun to focus on species and stocks of concern. This section provides some context for these management changes as well as a focus on future fisheries management and allocation issues.

Canada's Pacific fisheries have been transformed in less than a century. Much of this change is due to industrial-scale fisheries that taxed the limits of conservation and threatened the sustainability of fisheries and human communities that depended on them.

First Nation communities traditionally controlled access to rich fisheries at fishing sites and grounds throughout British Columbia. Traditional management included the use of sophisticated fishing methods including weirs to capture salmon. These methods resulted in the selective capture of large quantities of fish, but also in the conservation of healthy stocks. There is evidence of their use almost everywhere in B.C.

Modern fisheries changed all that by shifting much of the focus away from more selective terminal fisheries to saltwater fisheries where increasingly sophisticated boats and gear made it possible to catch all or nearly all the passing fish.

COMMERCIAL FISHERIES

Beginning in the 1920s, experiments began with limited entry licencing that restricted the number of people who could fish. But major changes did not take place in this respect until the late 1960s. Prior to that, fisheries were open and relatively unregulated. Policies focussed on economic efficiency with the general objective being to maximize economic production. On the Pacific Coast the collapse of herring fisheries in the late 1960s signalled the need for change. These changes are described in the 1976 Policy for Canada's Commercial Fisheries, which set a policy objective of "best use" of the fishery resource based on biological, social and economic criteria. To meet that objective plans were developed to apply entry controls to various fisheries.

Limited entry licencing was formally put in place in Pacific fisheries starting in 1969 with the objective of improving the profitability of Canada's fisheries. Salmon fisheries were subject to licence limitations in 1969, herring in 1974, and halibut in 1979 as part of the Davis Plan. Entry was subsequently limited for a large number of other fisheries in ensuing years including spawn-on-kelp, groundfish trawl, abalone, shrimp trawl, sablefish, shrimp by trap, crab, green sea urchins, red sea urchins, geoduck clam and sea cucumbers.

Limited entry provided some security for fishermen and those vested rarely opposed it. But criteria to qualify for licences often discriminated against part-time fishermen. This affected Natives particularly hard. The Davis Plan did not improve the profitability of fisheries but led to increased investment in vessels and gear in the "race for fish". Limited entry also affected Native participation in fisheries.

More recent changes have focused on "overcapacity", where many large vessels can only fish a few days a week or year unless they have multiple licences. A major salmon fleet reduction called the Mifflin Plan took place between 1996 and 2000, halving the number of salmon vessels.

Individual Fishing Quotas (IFQs) are a more recent licensing trend in B.C. fisheries. Individual vessel quotas were put in place for halibut, herring spawn-on-kelp, abalone, sablefish, geoduck, red sea urchin, sea cucumber fisheries and most recently, groundfish trawl fisheries. Individual Vessel Quotas (IVQs), a type of IFQ, have more recently been discussed for rockfish and salmon.

Positive benefits of IFQs are improved profitability of individual businesses, matching of investment with revenue, transfers of management costs from DFO to fishers, and year-round availability of fish that benefit fishers and consumers. Negative effects include those who lose from how quotas are initially determined and, from the perspective of new entrants, the cost of acquiring quota and licences. IFQ fisheries also require detailed information about fish stocks, which adds to management costs. There is additional concern that these quotas may increase poaching and high-grading (the dumping of low value products), which will further increase fisheries management costs. Other concerns include absentee ownership, consolidation of quotas and less employment in the fishery.

Various studies and programs have attempted to deal with problems in the commercial fisheries. For instance the 1982 Pearse enquiry recommended drastic fleet reduction and a system where fishermen would bid for licences and pay taxes on their landings. Fishermen rejected it. Another approach was tried in the late 1970s when the Salmonid Enhancement Program was established with the goal of doubling salmon production. That goal was not realized due to lack of funding for subsequent stages and decreases in marine productivity.

Licencing and quota systems have established significant private property values in the B.C. commercial fishery. Total value of commercial fishing licences and

continued on page14

First Nations and Commercial Fishing Licences

Coastal First Nations have struggled to maintain participation in B.C. commercial fisheries and have maintained a presence in salmon and herring fisheries largely as a result of government policies. Those policies have been less proactive towards participation of First Nations in other fisheries.

The following provides a brief overview of aboriginal participation in various commercial fisheries.

The number of aboriginal owned and operated commercial salmon licences gradually declined to 1979 when limited entry was introduced (Figure 1). At that point, aboriginal owned and operated licences numbered 712. This represented 17 per cent of the total of 4,216 commercial licences.

Over the next decade, aboriginal participation in the commercial salmon fishery slightly increased, due in part to the buyback of the B.C. Packer's fleet. But by 2003, it was pretty much back to where it had been 25 years earlier.

While the number of aboriginal owned and operated licences was virtually identical in 2003 to what it was in 1979 (715 licences versus 712), the total number of commercial salmon licences had drastically decreased to 2,221. This meant that the percentage of aboriginal owned and operated licences stood at 32 per cent.

Of the 715 aboriginal owned and operated commercial salmon licences in 2003, 49 were held by non-aboriginals but operated by aboriginal people. Of the 666 licences owned outright by aboriginal interests, the majority was controlled by First Nations or their organizations rather than by individuals. The breakdown of aboriginal-owned licences was as follows:

- 99 full fee licences held by individuals,
- 206 reduced fee "A-I" licences held by individuals,
- 107 communal "F" licences, and
- 254 Northern Native Fishing Corporation or "N" licences.

TABLE 1. First Nation Halibut Licences

Includes owner operated and individual

YEAR	FIRST NATION LICENCES	ALL LICENCES	%	SOURCE
1950	263	N/A	28%	Scow (1987)
1979	12	319	4%	Scow (1987)
1987	46	433	11%	Price Waterhouse (1989)
2003	53	435	12%	Michelle James (2003)

NOTES:

1. All licences in 1950 included halibut and blackcod so Native % for halibut was likely higher
2. Licence numbers in 1979 were before appeals that resulted in 30 Aboriginal and 405 Non- Aborginal licences for a total of 435
3. 2003 total includes 26 communal and 27 individual or company transferrable licences

The story in the commercial halibut fishery is different. Aboriginal people and organizations held only 12 per cent of licences in 2003 (see Table 1). Many aboriginal people and First Nations didn't qualify for licences when limited entry was introduced in about 1979. Today, about half of the 53 aboriginal-held licences are communal F-licences *(see Table in Appendix E).*

Aboriginal participation in the roe herring fishery has been relative stable over the years at 28 per cent, with the majority of commercial herring licences held as reduced fee licences *(Appendix E).* Participation in most groundfish and shellfish fisheries is dismal. Efforts were made to create Band licenses in a few shellfish dive fisheries in the late 1980s when entry was limited to these fisheries. Exceptions to these trends are the herring spawn-on-kelp and clam fisheries and a new sardine fishery where aboriginal participation is relatively high as a result of policies implemented at the time when these fisheries were limited *(Appendix E).*

FIGURE 1 Trend in Aboriginal Owned and Operated Salmon Licences

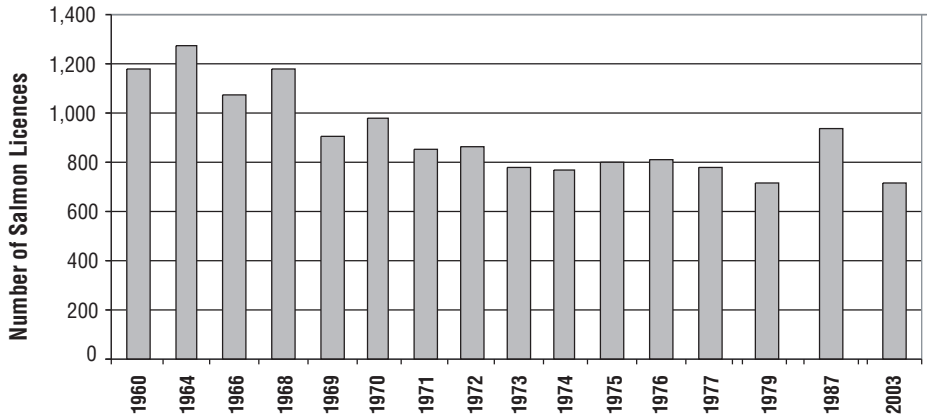


TABLE 2 Estimation of Licence and Quota Values by Fishery

vessel value excluded

	NUMBER OF LICENCES	VALUE / LICENCE ($)	TOTAL LICENCE VALUE ($)	QUOTA VALUE ($)	FISHERY VALUE LICENCE + QUOTA ($)
SALMON FLEET					
Salmon Seine – AS	266	$361,880	$96,260,000	-	$96,260,000
Salmon Gillnet- AG	1075	82,767	88,975,000	-	88,975,000
Salmon Troll – AT	520	99,115	51,540,000	-	51,540,000
Salmon Total			236,775,000	-	236,775,000
HERRING FLEET					
Roe Herring Seine – HS	251	709,462	178,075,000	-	178,075,000
Roe Herring Gillnet- HG	1250	140,564	175,705,000	-	175,705,000
Spawn on Kelp – J	37	925,000	34,225,000	-	34,225,000
Herring Total			388,005,000	-	388,005,000
GROUNDFISH FLEET					
Groundfish Trawl – T	142	81,900	11,629,800	267,622,500	267,622,500
Halibut – L	410	46,860	19,212,600	317,250,000	336,462,600
Sablefish – K	47	190,000	8,930,000	139,568,817	148,498,817
Rockfish Hook and Line – ZN	248	101,782	25,242,000	-	
Groundfish Total			65,014,400	724,441,317	752,583,917
SHELLFISH FLEET					
Non-Dive Fleet					
Crab – R	213	352,000	74,976,000	-	74,976,000
Prawn- W	247	438,000	108,186,000	-	108,186,000
Shrimp – S	235	49,200	11,562,000	-	11,562,000
Shellfish Total			194,724,000	-	194,724,000
DIVE FLEET					
Geoduck – G	55	3,000,000	165,000,000	-	165,000,000
Red Urchin – ZC	104	235,000	24,440,000	-	24,440,000
Green Urchin – ZA	49	40,000	1,960,000	-	1,960,000
Sea Cucumber – ZD	85	100,000	8,500,000	-	8,500,000
Dive Fishery Total			199,900,000	-	199,900,000
Shellfish Non-Dive/Dive Total			394,624,000	0	394,624,000
All Fisheries Total			$1,084,418,400	$724,441,317	$1,771,987,917

NOTES:

1. Values are approximately December 31, 2002 and exclude AI, F and N licence categories.
2. Source: Nelson Bros Fisheries Ltd, Licence Values in the Pacific Fishing Fleet, report prepared for DFO, March 31, 2003.

quota for all species is estimated to be $1.77 billion as shown in Table 2. Note that this excludes Native category licences. The fishery with the highest value was herring at $388 million. Shellfish licences combined account for $395 million, a similar amount. This is followed by halibut at $336 million, groundfish trawl at $267 million and then salmon at $237 million.

RECREATIONAL FISHERIES

The recreational fishing sector consists of individual anglers and businesses that provide services to those anglers. There are essentially two recreational fisheries, one in tidal waters and managed by DFO, the other in freshwater bodies and managed by B.C. In general, recreational fisheries have been growing in B.C. As a result, more attention is being paid to them. Generally, numbers of anglers have rarely been regulated. One exception has been freshwater angling, where limits were put in place on the number of angling guides and guided angler rod-days. These limits only applied to certain waters. Further information on the recreational sector is provided in the discussion on Allocation Policies in this section and Section 2.4 Overview of B.C. Fisheries.

INTERNATIONAL ISSUES

International issues have an impact on some fisheries. Migrating salmon stocks are jointly managed by Canada and the U.S. through international agreements. The International Pacific Salmon Fishery Commission dealt with Fraser River sockeye. This was replaced by the Pacific Salmon Commission, which under the Pacific Salmon Treaty of 1985, has a mandate to deal with a variety of coast-wide stocks, most notably Fraser, Skeena and Nass sockeye and all stocks of chinook salmon. Under the Treaty a bi-lateral Canada-U.S. body, the Fraser Panel, is responsible for in-season management of Fraser River fisheries in approach areas. Similarly, the International Pacific Halibut Commission deals with management and allocation of Pacific halibut. In most cases (the Fraser Panel being a notable exception), once catch shares are agreed to the two countries carry out the management of their own domestic fisheries. A major change affecting many fisheries including salmon, halibut and groundfish was Canada's extension of its fishing limits to 200 nautical miles or 370 kilometres offshore in 1977.

FIRST NATIONS PARTICIPATION IN FISHERIES

Various programs have attempted to maintain or revive aboriginal participation in commercial fisheries. Measures in response to the Davis Plan, for example, included special licence provisions (category A-I reduced fee licences) and financial assistance programs to upgrade vessels and gear. Programs were also developed to support Native-owned canneries. But they met with poor success. Approximately 252 Category-N salmon licences were created in 1982 when the Northern Native Fishing Corporation bought most of B.C. Packers Ltd.'s northern fleet. The majority of these licences are leased to First Nation fishers. Also, since 1994 DFO has purchased salmon licences that are transferred to First Nations on an interim basis. Another licence category, the F-licence was created for this purpose. Native involvement was also an important component and objective of the federal Salmonid Enhancement Program.

In 1992 the federal Aboriginal Fisheries Strategy (AFS) was initiated in response to the *Sparrow* decision, which affirmed the aboriginal right to fish for food, social and ceremonial purposes. The AFS was founded on an approach of negotiated agreements with First Nations, covering a spectrum of fisheries management activities.

The AFS also attempted to deal with economic access to fisheries. Three Pilot Sales initiatives in the lower Fraser, West Coast of Vancouver Island and the Skeena River were initiated in 1992. First Nations received fixed allocations of salmon that could then be sold. In some cases commercial licences were retired and equivalent allocations of fish were transferred to these programs. In the case of the Skeena, the allocations for Pilot Sales were permitted when in-river returns of sockeye were larger than the spawning requirements for enhanced stocks. Pilot Sales were cancelled in 2003 by the federal fisheries department after a British Columbia court ruled in *Kapp* that the sales discriminated against non-Native fishermen. The decision is currently under appeal. Another component of the AFS is the Allocation Transfer Program in which the federal government pursued a policy of purchasing commercial licences and quota from willing buyers and transferring these to First Nations. A total of $51.2 million has been spent since 1994 and

197 licences had been transferred by January 2003. The annual budget for the program – $5.9 million in fiscal year 2003/04 – ensures that progress will continue to be slow. A new AFS component was added in 2003, the Aboriginal Aquatic Resource and Oceans Management Program. This is geared towards development of new structures to involve First Nations in multi-sector planning and management of fisheries and ocean initiatives.

ALLOCATION POLICIES

Sharing of fish among fishing sectors is a difficult issue. Under Canadian law it is the responsibility of the Minister of Fisheries. In 1999 DFO released an allocation policy that:

- Acknowledges the priority right of First Nations to fish for food, social and ceremonial purposes and treaty obligations over commercial and recreational fisheries.
- Gives the recreational sector priority over the commercial sector for chinook and coho salmon and more predictable access to sockeye, pink and chum salmon.
- Guarantees the commercial sector a minimum share of 95 per cent of sockeye, pink and chum salmon.
- Proposes to establish an allocation board to implement established allocation polices and provide advice to the Minister on changes, as requested. The board would be responsible for allocation for commercial and recreational fisheries for all species, but First Nations fisheries would be excluded from the board's mandates. The board would focus on long term issues, hold public hearings and be subject to full public disclosure. The board has not yet been established and further consultation is proposed.
- Confirms that where treaties affect commercial allocations, steps will be taken for an appropriate number of commercial licences to be voluntarily retired from the commercial fishery.

Another issue has been the growing recreational catch of halibut. In October 2003, the Minister announced a 12 per cent catch ceiling for recreational catches of halibut and his intention to establish a market-based mechanism for future allocation adjustments.

The allocation policy also sets out rules regarding access to salmon that are deemed to be in excess of spawning requirements. In DFO parlance this is called Excess Salmon to Spawning Requirements or ESSRs. Salmon fisheries are to be managed to minimize surpluses over and above escapement requirements for naturally spawning stocks and hatcheries. But if these occur then the opportunity to catch these fish is offered first to First Nations who live in the area. Profits are to be directed towards fisheries management activities such as enhancement, stock restoration, habitat enhancement, or research. Generally these fishing opportunities are not reliable and arise only after all other users are satisfied.

EMERGING ISSUES AND TRENDS

A number of proposed actions and new policies or laws will have further impact on fisheries.

These include the new 2003 federal *Species at Risk Act,* which is in part intended to implement Canada's international obligations under the 1992 United Nations Convention on Biological Diversity. The new act applies to all aquatic species, migratory birds, wildlife and other life forms on federal lands. Under the *Act,* the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses the status of a species based on the best available information. If COSEWIC determines that a species is at risk of extirpation, or is endangered or threatened the Governor in Council must decide within nine months whether or not to add the species to its List of Wildlife Species At Risk. If that list categorizes a species as endangered or threatened, the federal Minister of Fisheries and Oceans is required to develop a recovery strategy and action plan. The *Act* requires aboriginal participation in the preparation of these plans.

A variety of marine mammals, a marine reptile (leatherback turtle) and one invertebrate species (Northern abalone) have been listed. Four fish populations are in the process of being listed. This may have significant impacts on the conduct of Pacific fisheries. These are Upper Fraser River coho, Cultus Lake sockeye, Sakinaw Lake sockeye and boccaccio (a rockfish species). All have been scientifically assessed as being at risk by COSEWIC, which means that unless actions are taken the species are likely to become extinct. (On April 23, 2004 federal Environment Minister David Anderson declined to include Upper Fraser coho and boccaccio in his transmittal of 79 other species to Cabinet for listing, and instead announced an "extended consultation

period" to consider the potential impacts of listing. In addition, the Minister declined COSEWIC's request for emergency listing of Cultus and Sakinaw Lake sockeye, leaving them to the normal consultation and listing processes.) If the species are ultimately listed, then recovery plans are likely to restrict takes in many fisheries. For example, conservation measures for Upper Fraser River coho caused major disruptions to salmon fisheries on the Southern B.C. coast from 1998 to 2000 when exploitation rates were reduced from 40 per cent to about 6.5 per cent.

A related policy initiative to the *Species at Risk Act* is a draft Wild Salmon Policy that was released in March 2000. The policy aimed to conserve wild Pacific salmon populations by maintaining the diversity of local populations and their natural habitats. The policy was based on managing aggregates of local populations called conservation units. Conservation units were to be managed to minimum and target levels of abundance based on estimates of productive capacity. This draft policy was publicly reviewed but has yet to be finalized and implemented. DFO is preparing a revised policy that will include operational guidelines including a definition of conservation units, details on reference points, enhancement, habitat and resource management guidelines and an integrated planning process framework. The Wild Salmon Policy provides a framework for responding to declines in salmon populations before populations become at risk to avoid the consequences of statutory restrictions.

Legislation and policies are also in place for establishing marine protected areas. These are an important element of a precautionary approach to fisheries management and will result in restrictions on fishing in these areas. Protected areas are in the process of being planned in the southern Strait of Georgia and southern Haida Gwaii under the *National Marine Conservation Areas Act.* Four pilot marine protected areas were identified in 1998 and one of these, the Endeavour hydrothermal vents, was designated as a marine protected area under the *Oceans Act* in 2003. A Federal-Provincial marine protected areas strategy has been under development for several years and envisions a network of marine protected areas off of the B.C. coast by 2010.

Another trend has been the involvement of other sectors and interests in fisheries management. In the early days of commercial fisheries, government made most of the decisions with input from industry. In the 1970s and 1980s there was a move to formalize this process by establishing fisheries advisory committees. More recently multi-sector boards have been established to more properly reflect Canadian interests. The role of First Nations in these processes is still unclear. There is more discussion of this in Section 5.

Other policies or proposed actions that may also have impacts on fisheries include possible offshore oil and gas developments, further expansion of fish-farming activities, and declines or changes in salmonid enhancement initiatives.

2.3 Treaty Process, Treaty Implementation

The British Columbia treaty process was heralded in 1992 as the path to certainty for First Nations, governments and industry. Fish were expected to be a vital component of negotiations. This section deals with some reasons why expectations for the 1992 treaty process have not been met, and why some First Nations are considering litigation rather than negotiations.

HISTORICAL TREATIES

Since contact, the British Crown pursued a policy that recognized aboriginal title. An effect of the policy was that only the Crown could acquire lands from First Nations, and only by treaty. By the late 1800s, the Crown had entered into major treaties with First Nations in eastern and central Canada. It did not as a rule, however, extend this initiative to much of present-day B.C.

Only a handful of treaties were made in B.C., including the 14 Douglas Treaties on Vancouver Island, the three "Barricades Treaties" at Lake Babine and the Stuart/Nechako, and Treaty 8, which extended from Alberta into areas of northeastern B.C. Fisheries issues were central to the discussions leading up to all of these treaties. First Nation signatories to the Douglas Treaties, currently negotiating in the B.C. treaty process, have the right to "fish as formerly", under the terms of their treaties. Similarly, the Lake Babine Nation, also in the B.C. treaty process, maintains that their 1906 "Barricades Treaty", a result of a struggle for control of

the Lake Babine fishery in the early 1900s, continues to secure certain fisheries rights for them to Babine stocks.

MODERN DAY BRITISH COLUMBIA TREATY PROCESS

The B.C. treaty process was established in 1992 by agreement between Canada, the Province and the First Nations Summit. The agreement followed a 1991 report by the B.C. Claims Task Force setting out 19 recommendations to help guide the parties. The parties established the B.C. Treaty Commission and a six-stage treaty process, designed to advance negotiations and facilitate fair and durable treaties. The parties were optimistic in the beginning. Then-Prime Minister Brian Mulroney even suggested that treaties would be concluded in the province within 10 years. Instead, negotiations have been very slow, as the parties grapple with complex issues, often disagreeing on fundamental components of treaty, such as certainty, compensation for past infringements, governance, financial arrangements, land status and fisheries.

There are currently 55 First Nations (representing more than 70 per cent of the First Nations' population in B.C.) participating in negotiations. Because some First Nations negotiate together, there are 45 sets of negotiations. As of March 2004, there were 40 negotiating tables in Stage 4 or Agreement-in-Principle negotiations. Only five tables (Sechelt Indian Band, Maa-Nulth First Nations, Lheidli T'enneh Band, Sliammon Indian Band and Tsawwassen First Nation) have reached Stage 5 Final Agreement negotiations.

INTERIM MEASURES AGREEMENTS

One of the Task Force's recommendations was that "the parties negotiate interim measures agreements before or during the treaty negotiations when an interest is being affected which could undermine the process." In making this recommendation, the Task Force stated that interim measures agreements would be an important early indicator of the sincerity and commitment of the parties to the negotiation of treaties.

First Nations have continuously pressed Canada and B.C. to live up to this recommendation. Canada and B.C. wanted to only negotiate interim measures agreements after AIPs are signed, whereas First Nations want to protect resources pending the slow negotiations toward AIPs.

Until recently, there have been few fisheries-related interim measures agreements. This was likely due to the existence of the Aboriginal Fisheries Strategy, operated through the Department of Fisheries and Oceans (DFO) Canada. Under interim measures programs, the Lheidli T'enneh First Nation has been testing local commercial sales, value-added processing and various stock assessment and management projects.

On April 28, 2000, the parties recommitted to the concept of interim measures agreements in the tripartite document "A Statement on Interim Measures Principles for Treaty Negotiations in British Columbia." While it is not clear how effective the tripartite statement has been, it could be used as a vehicle for changes in the fishery.

AGREEMENTS-IN-PRINCIPLE – FISHERIES PROVISIONS

Stage 4 of the treaty process – Agreements-in-Principle (AIP) – is where the parties set out the broad basis for negotiating Final Agreements, or treaties. AIPs are not legally binding documents. Consequently, there is potential for changes to be made through Final Agreement negotiations. As of March 2004, five AIPs have been concluded that address governance, as well as land and resource issues. Some common features regarding fisheries in the more recent AIPs with the Maa-Nulth, Lheidli T'enneh, Sliammon and Tsawwassen First Nations include:

Management

The AIPs provide that the federal and provincial Ministers will retain authority within their respective jurisdictions to manage and conserve fish and fish habitat. First Nations will have law-making authority with respect to internal regulation of their fishery.

The parties intend to address First Nation participation in the management of fisheries through a Joint Fisheries Committee (JFC) which will include the First Nation, Canada and, in most cases B.C. The JFC will be discussed in greater detail in Sections 2.5.3 and 5.1.3.

Allocation

The First Nation will have the right to catch fish for food, social and ceremonial purposes (i.e. domestic fisheries where the fish may not be sold) under the treaty, with

harvesting levels defined as an average annual catch that may vary with stock abundance. The First Nation's allocation will be limited by measures necessary for conservation, public health and public safety. The federal Minister will formally authorize these First Nations fisheries based on the annual fishing plans. Commercial fisheries will be negotiated outside of the treaty, and any First Nation commercial fisheries will have the same priority as other commercial fisheries.

Readers interested in a summary of features of specific AIPs should refer to Appendix B.

NISGA'A FINAL AGREEMENT

The Nisga'a Final Agreement is currently the only modern day treaty in B.C. It addresses issues of uncertainty by exhaustively listing the section 35 rights of the Nisga'a peoples and modifying them into treaty rights. Any rights not set out in the treaty are 'released'.

Approximately 2,500 of 5,500 Nisga'a people live in the treaty area in the Nass River watershed which they share with 100 non-aboriginal residents. It is important to note that the Nisga'a Final Agreement was negotiated outside of the B.C. treaty process that is described in the previous section.

The Nisga'a Final Agreement includes the general right to take fish and aquatic plants for domestic purposes and the right to sell Nass salmon caught in Nisga'a fisheries under specific conditions. The Nisga'a have been conducting their post-treaty fisheries for four years. A Nisga'a fishery case study elsewhere in this report provides further details on the fisheries component of the Nisga'a Final Agreement and the results from the treaty implementation process.

CONCLUSION

Treaty negotiations in B.C. have been very slow since the inception of the modern treaty process in 1991. Parties have not seen eye to eye on many critical issues including fisheries. First Nations have been increasingly frustrated by the bottom lines of Canada and B.C., as well as by their policies that have hindered progress. A result of this frustration has been that more and more First Nations are turning to litigation to protect their rights and interests. For example, two groups involved in treaty negotiations have initiated litigation, the Nuu-chah-nulth and Lax Kwalaams. The Haida, who were not active in the treaty process, have also initiated litigation.

Now that some of the history of the fishery and policy relating to First Nations in the fishery has been described, we move on to a description of the many fisheries in B.C.

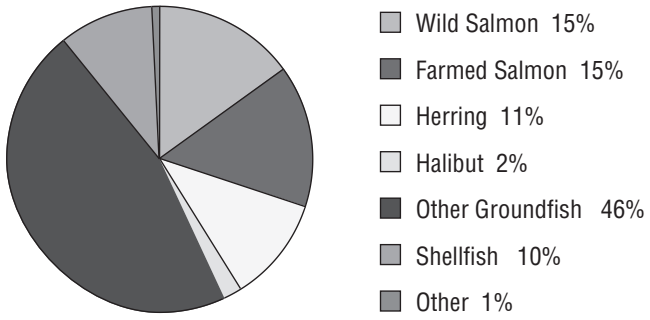
2.4 Overview of B.C. Fisheries

British Columbia's fisheries resources are diverse. As for their management, almost all saltwater fisheries are managed by the Department of Fisheries and Oceans while freshwater fisheries and aquaculture are largely the responsibility of the Province.

COMMERCIAL

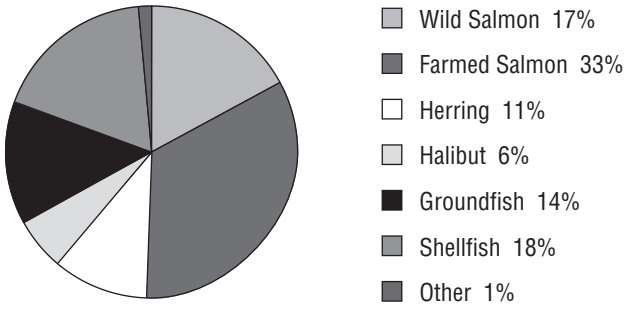
The average landed weight of seafood in the past decade (1992-2002) was 277,300 tonnes. In order of importance landings were groundfish (other than halibut and sablefish) (46 per cent), wild salmon (15 per cent), farmed salmon (15 per cent), herring (11 per cent) and shellfish (10 per cent) (Figure 2). In recent years (1992 onwards), the total landed value of all seafood products in British Columbia has been relatively stable, ranging between $532 million and $732 million with an average of $618 million (Figure 3). Landed value in order of importance was farmed salmon (33 per cent), shellfish (18 per cent), wild salmon (17 per cent), groundfish (14 per cent) and herring (11 per cent). Different seafood sectors have, however, fared in different ways. For example, there has been a decline in the landed value of wild salmon due largely to restrictions on catches due to conservation concerns (Figure 4). Farmed salmon more than

Figure 2 B.C. Seafood Landed Weight



Average 277.3 tonnes 1992-2002

FIGURE 3 B.C. Seafood Landed Value



Average value $618 million 1992-2002

FIGURE 4 Annual Landed Value of Salmon – Wild and Farmed

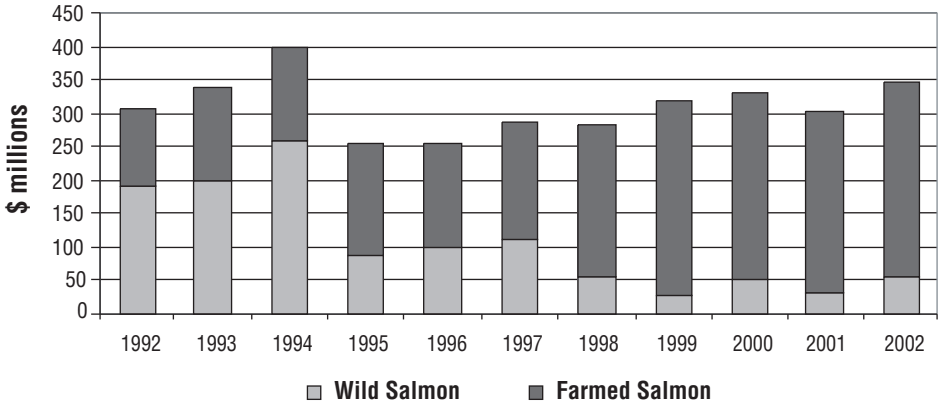
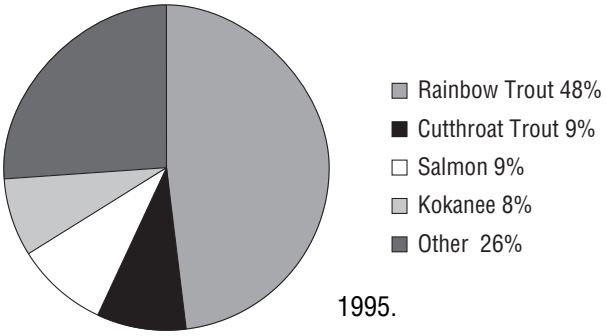
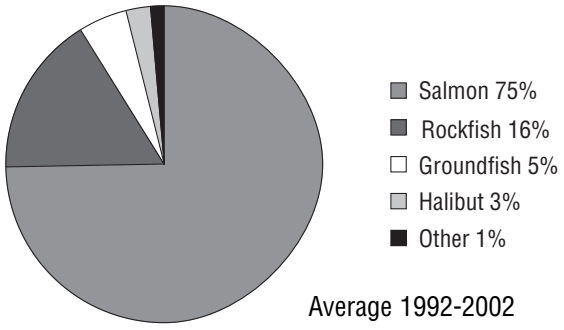


FIGURE 5 B.C. Freshwater Recreational Catch



1995.

FIGURE 6 B.C. Tidal Water Recreational Catch by Species



Average 1992-2002

doubled in value since 1992, going from $115 million to $290 million, due to production increases. Other fisheries that have shown similar increases in value (roughly doubling over this period) are shellfish and halibut. This was due largely to rising prices.

RECREATIONAL

In addition to the value generated by commercial fishing interests, recreational or sport fisheries constitute an increasingly important economic component of fisheries in the province. In 2002, the Department of Fisheries and Oceans issued nearly 258,000 saltwater licences and B.C.'s Ministry of Water, Land and Air Protection issued more than 355,000 freshwater licences. About one-half of the total recreational fish caught in freshwater in 1995 were rainbow trout (Figure 5). The rest of the catch consisted of about 15 other species and none made up more than 10 per cent of the catch. Most of the saltwater recreational catch consists of salmon, rockfish, groundfish and halibut (Figure 6). Combined, the fishing activities associated with these licences translated into approximately 6.4 million angler days and generated about $675 million in revenues in 2001.

While there is obvious economic importance attached to the recreational industry, there are persistent concerns about how sustainable these activities are in freshwater fisheries. While most B.C. streams have had some form of inventory, there is little population or trend analysis for species other than some salmon, steelhead and trout populations. Moreover, the sparse data that has been collected on specific freshwater fish populations points to declines. Likewise in saltwater, large recreational fishing effort in areas such as the Strait of Georgia affect depressed local populations of rockfish and lingcod and a variety of initiatives are seeking to rebuild these populations.

Generally, the trend of growth in recreational fisheries leveled off in the 1990s. In the long term growth trends are expected to continue.

PROCESSING SECTOR

As of 2002, there were 213 plants processing seafood in British Columbia. From 1992 to 2002, B.C. seafood landings averaged 277 thousand tonnes. The fish destined for processing had a landed value of $618 million and a sales value (following processing) of $1.04 billion (Figure 7). In 2002 the B.C. processing sector provided about 9,100 jobs (5,690 person-years) with an estimated 30 per cent of the employment aboriginal, with a higher share in Prince Rupert (60 per cent). About two thirds of plants were involved in the production of seafood for the domestic market and export markets, primarily Japan and the United States. The other one third processed fish either caught in recreational fisheries or for bait or animal feed production. The overall economic value of the processing sector was fairly stable in the 1990s. While there were declines in the quantity of commercial salmon processed, those declines were offset by increases in the processing of product from salmon farms. The B.C. fish-processing sector continues to be affected by fundamental shifts in the marketplace for salmon. These include increases in salmon supply from farming operations and reduced prices for wild product. Overall, B.C. is a small player in world seafood markets accounting for 0.2 per cent of world production of farmed and wild salmon products.

AQUACULTURE

Both finfish and shellfish aquaculture are expanding and evolving in B.C. Currently, aquaculture production accounts for more than 22 per cent of Canada's seafood production. Most of the industry's facilities are located in B.C. and New Brunswick. Farmed salmon production in B.C. doubled from 1992 to 2002 (Figure 4). Despite ongoing concerns about fish farm pollution and disease spread as well as the global supply of fishmeal for fish farming operations which is derived largely from the capture and processing of wild fish species such as anchovies, the industry continues to grow and diversify. While aquaculture development has potential economic and social benefits such as employment and economic diversification, new aquaculture tenures alienate foreshore and marine areas and may adversely affect traditional First Nation practices.

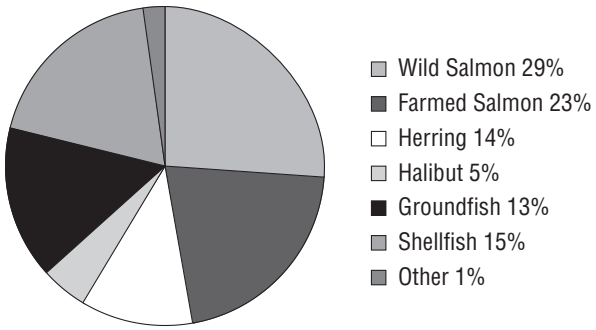
By far, the largest production of farmed seafood products in B.C. is salmon. Salmon farming in B.C. has been contentious from the beginning. A seven-year moratorium on new salmon-farming operations was lifted in April 2002. In British Columbia many First Nations opposed the lifting of the moratorium.

In general, the provincial government's response to First Nation concerns with salmon farming has been to try and encourage aboriginal participation in the industry. This has enjoyed limited success, with a few new salmon farms opening in remote First Nation communities. Shellfish aquaculture opportunities, on the other hand, have been well received by coastal First Nations. Canada and B.C. have invested resources to develop viable shellfish operations with several southern B.C. coastal First Nations. The Nuu-chah-nulth established a corporation to oversee and manage shellfish operations on behalf of member First Nations. In addition, some First Nations on the North Coast have established pilot shellfish farms in their territories and are examining the feasibility of shellfish farming. Despite these recent forays into shellfish aquaculture, however, First Nations are still only minor players in the industry.

SUMMARY

The above information is, admittedly, but a thumbnail sketch of a complex and diverse fisheries industry in B.C. Next we will examine in more detail various fisheries in the province, beginning with salmon.

FIGURE 7 B.C. Seafood Wholesale Value



Average Value $1.04 billion 1992-2002

2.4.1 Salmon

Salmon fisheries have for thousands of years been of central importance to First Nations both on the Coast and deep into the Interior of present day B.C. Major river systems contributing to the province's salmon populations are the Fraser, Skeena, Nass and transboundary rivers including the Stikine, Taku and Columbia, as well as numerous rivers and streams along the coast and on Vancouver Island and Haida Gwaii.

Figure 8 shows coast-wide salmon catches of all species from 1992 to 2002. Salmon catches declined in the mid 1990s in B.C. due to conservation measures for specific populations, in particular coho, that restricted catches of other species (Figure 9). Conservation measures were also taken for specific runs of chinook (Figure 10) and sockeye salmon.

Most salmon continue to be caught in commercial fisheries with the majority catch consisting of sockeye, pink and chum (Figure 11). Generally, seine fisheries target sockeye, pink and chum while gillnet fisheries target sockeye and chum although in recent years the pink catch has been significant. Troll fisheries historically targeted chinook and coho but in the last few years have moved to other species when access has been limited to chinook and coho. Recreational fisheries also catch high numbers of chinook and coho salmon (Figure 6). Recreational fisheries for these species have also been constrained in some years for conservation reasons. Average recreational catch of all species from 1992 to 2002 was 577,000 salmon.

The First Nations catch of salmon for food, social and ceremonial purposes is significant. DFO catch statistics for FSC

FIGURE 8 Annual Coastwide Salmon Catch by Sector

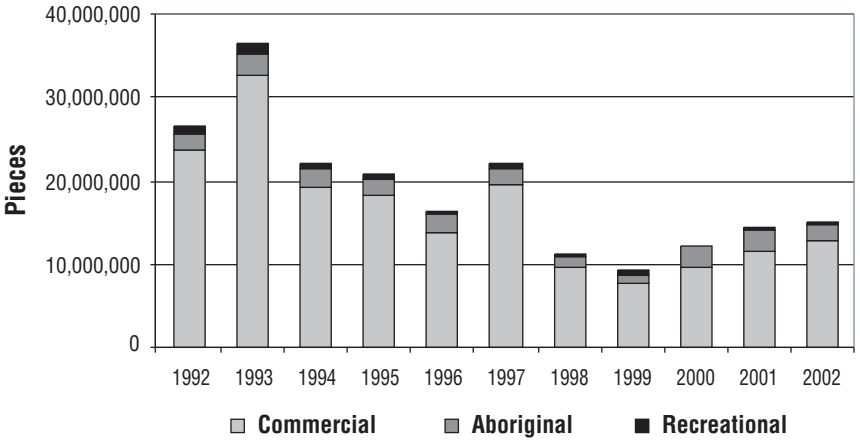


FIGURE 9 Annual Coho Catch by Sector

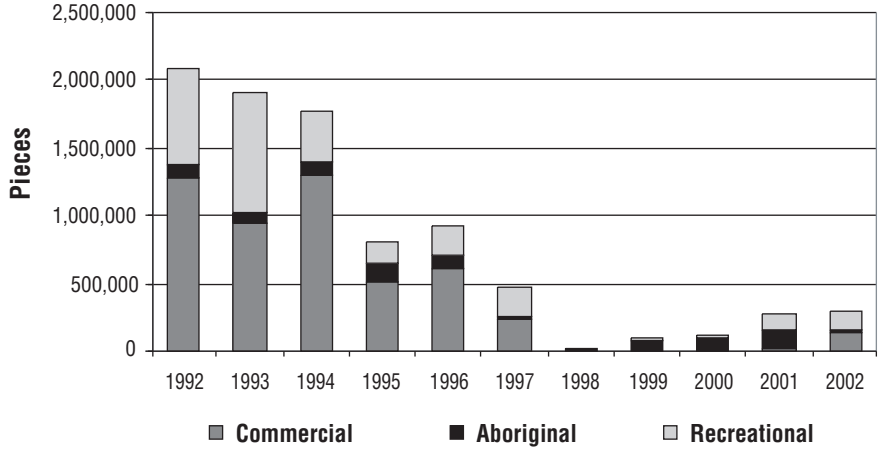
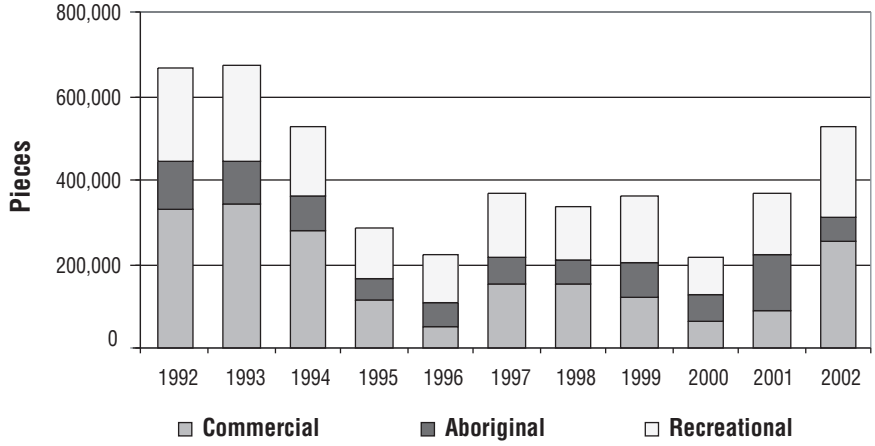


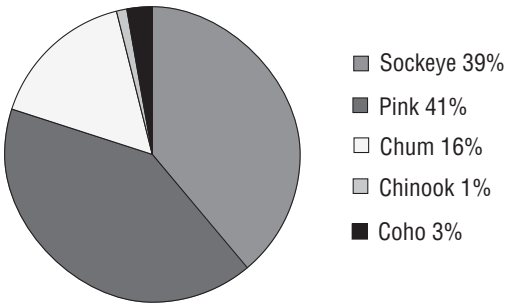
FIGURE 10 Annual Chinook Catch by Sector



fisheries are estimates, however, because half of the First Nations' population (2003 statistics) live off-reserve and not all catches are recorded. Average catch of all salmon species by First Nations from 1992 to 2002 was 976,000 salmon. Over 80 per cent of this salmon catch was sockeye but significant fisheries for other species occur in many parts of the province (see Figure 12). The population of registered Status Indians in B.C. was 114,430 in 2003. This averages to approximately eight fish per person. First Nations populations are growing at a rate faster than the general population. For instance the Royal Commission on Aboriginal Peoples estimated that the aboriginal population in B.C. would increase by 38 per cent from 1996 to 2016. Rapidly growing First Nation populations will increase demands for salmon in the future.

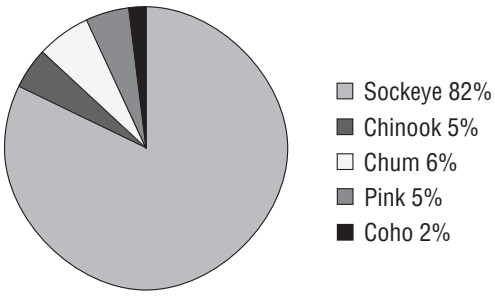
In the following pages we consider salmon fisheries on an area-by-area basis. Note that the descriptions focus to a large extent on sockeye because of its importance in First Nation and commercial fisheries. Data is often incomplete for other species.

FIGURE 11 Commercial Salmon Catch by Species



Total Over Period 1992-2002

FIGURE 12 First Nations Salmon Catch



Total Over Period 1992-2002

2.4.1.1 Fraser River Salmon

OVERVIEW

The Fraser River is B.C.'s largest salmon producing river, with major runs of sockeye, pink and chum salmon as well as large runs of chinook, coho, and steelhead.

SOCKEYE

The most economically important species is sockeye. Fraser River sockeye normally mature and spawn at four years of age. Of the151 individual spawning populations, approximately 20 sockeye runs are enumerated routinely. Eight of those runs exhibit persistent four-year cycles with predictable dominant years. In other words, a dominant run recorded in the year 1994 will be followed by dominant runs in 1998, 2002, etc. Figure 13 shows total sockeye returns, catch and escapement from 1992 to 2002 based on a run reconstruction. Fraser River sockeye catch by year is shown in Figure 14. On average the Canadian and U.S. commercial fisheries account for the majority of catch followed next by First Nations (Figure 15). First Nation catch is a combination of food, social and ceremonial fisheries, Pilot Sales and ESSRs. Further information on the Pilot Sales fishery is provided in Section 2.5, Case Studies.

For management purposes, individual sockeye runs are grouped into four aggregates that have similar run timing, meaning they return to the Fraser at roughly the same time.

Historically, the dominant salmon run in the Fraser system has been the sockeye stocks from the Shuswap Lake area in the Thompson drainage. These runs are followed in importance by the Chilko and Quesnel Lake sockeye runs, both of which are further up the Fraser than the Thompson. Stuart runs have also been important in some years.

Fraser River sockeye is a major source of fish for First Nations, both for food, social and ceremonial purposes as well as for economic needs. Tens of thousands of aboriginal people living along the lengthy river system rely on fish returning to their spawning grounds. The spawning grounds are in many cases hundreds of kilometers distant from where modern commercial fishers ply their trade.

Recent changes in Fraser-bound sockeye behavior and abundance have posed significant challenges to fisheries

managers. The majority of the late summer runs, for example, used to migrate through marine waters in early August, then delayed their migration for six to eight weeks during which time they were to be found near the mouth of the river. This meant that they typically reached the spawning beds in late September and early October.

Beginning in 1995, however, there was a significant shift in behavior. Instead of waiting at the mouth, the sockeye began an almost immediate move upriver. This earlier-than-normal migration resulted in much higher levels of mortality before spawning. The cause of this behavioral change is not understood.

PINK

Pink salmon have the shortest life cycle of all Pacific Salmon and always mature at two years of age. In the Fraser River returns are recorded every other year, and only on odd-years. Spawning is concentrated only in the lower reaches of the Fraser River and tributaries below Hope. During the past decade returns have declined, although the 2001 return was the second largest ever recorded.

COHO

There are two groups of coho assessed in the Fraser River. One is considered to be a more coastal group, found in the lower reaches of the Fraser. The other is found further upriver, primarily above Hope. The production of lower-river coho is very difficult to assess since they return in the late fall when water visibility conditions are poor. Adding to uncertainties about the true health of these stocks is hatchery production. Hatcheries produce a significant number of coho which mix with the wild populations.

Since 1998, the overall health of lower and upper river coho stocks have been

FIGURE 13 Annual Fraser Sockeye Returns

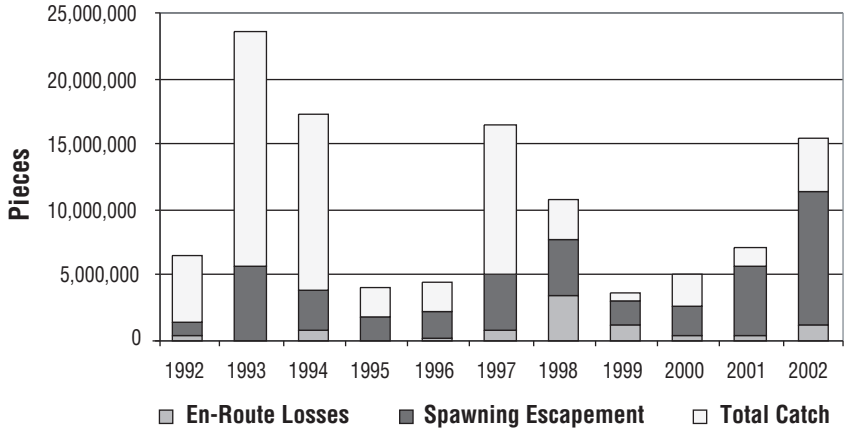


FIGURE 14 Annual Fraser Sockeye Catch by Sector

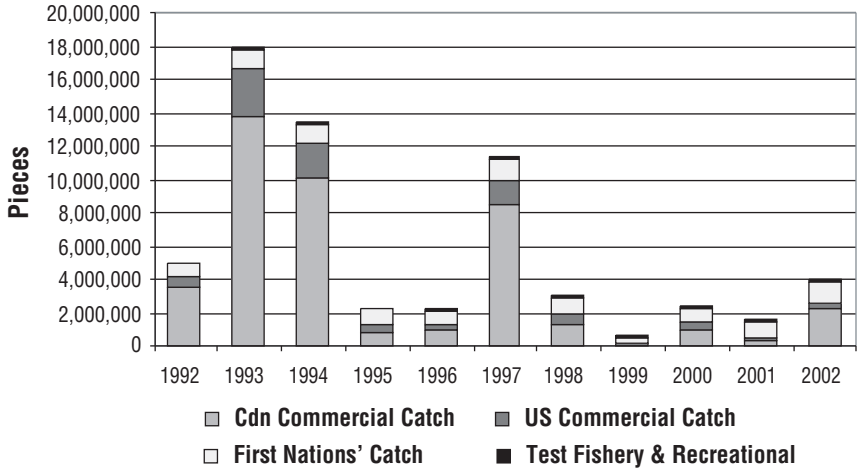
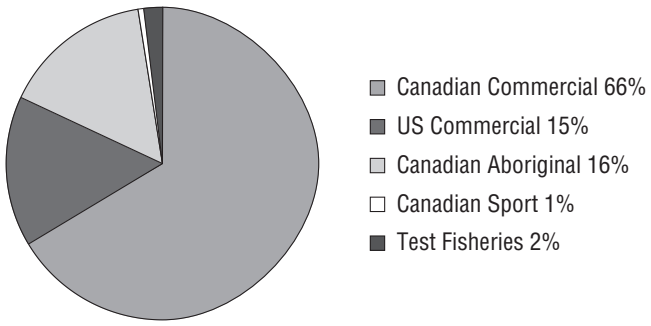


FIGURE 15 Fraser Sockeye Catch by Sector



Total Over Period 1992-2002

depressed, with clear signals that some runs were in danger of local extinction. Conservation measures taken by the Department of Fisheries and Oceans appear to have resulted in a significant reversal of the downward trend.

CHINOOK

Fraser River chinook are the most abundant in B.C. Populations of chinook are aggregated similar to sockeye, based on their run timing up river, spawning locations, life histories, and catch distributions in the ocean. Currently there are five aggregate groupings of Fraser-bound chinook. In general, these stocks have benefited from conservation measures to protect Interior coho as well as Vancouver Island chinook.

CHUM

Chum salmon are found over a wide area of the Lower Fraser system including some 121 tributaries below Hope. The vast majority, however, are found in about 10 rivers including the Harrison, Chehalis, Chilliwack, and Stave. Escapement records for the past two decades suggest that there has been a significant increase in spawning populations.

The increase is attributed to among other things hatchery production, reduced exploitation due to management measures, and quantitative escapement monitoring in the major spawning systems. Chum salmon are managed in one large aggregate due to their similar migration paths and run timing.

There are ongoing concerns about the survival of certain distinct salmon populations in the Fraser system including the sockeye stocks of Cultus Lake, coho salmon stocks on the Thompson and Stuart Rivers and a variety of steelhead stocks. These and others have been fished to the point where they are at risk of local extinction. The cause of this relates to their capture in mixed stock fisheries that fail to discriminate between the fish targeted for capture, which usually belong to a strong or dominant run, and the weaker stocks that may be swimming or co-mingling with them. The result is that weaker stocks become weaker still.

Changes in fisheries management in the mid-1990s to address some of these problems resulted in sometimes dramatic reductions to the number of salmon caught in commercial fisheries. In combination with generally depressed prices for salmon, this was a devastating blow to commercial fishing interests. At the same time, however, this may create opportunities for changes towards more sustainable fisheries. Those opportunities may come in the form of more selective "terminal" upriver fisheries. By fishing near where the salmon spawn, weaker stocks can be more readily separated from stronger stocks, ensuring the survival and rebuilding of distinct populations.

MANAGEMENT

Allocating and conserving Fraser River salmon stocks is among the most daunting of fisheries management challenges. Not only do about 100 First Nation communities in the Fraser River system rely on these stocks but, so too, do many Coastal First Nations, particularly those on Johnstone and Juan de Fuca Straits. Some Indian tribes in Washington State also depend on Fraser stocks.

Up to 1985, the International Pacific Salmon Fisheries Commission set the long-term management and production goals for Fraser River sockeye. The Commission was established by Canada and the United States to manage and share Fraser sockeye and pink salmon in the waters of southern BC and northern Washington State. In 1985 the Pacific Salmon Treaty was signed which, among other things, returned to Canada the responsibility to set long-term spawning goals for Fraser sockeye and pink salmon.

In the late 1980s DFO proposed a Fraser sockeye rebuilding plan. The plan's purpose was to try to rebuild some of the major producing stocks to levels that were observed in the late 1800s and early 1900s, prior to the Hells Gate slide. The other objective was to experiment with some of the off-cycle stocks to assess the feasibility of rebuilding them.

During the early 1990s a combination of larger spawning escapements and improved marine and freshwater survival lead to larger runs of some stocks. More recently, poor marine survivals, together with increased in-river moralities have lead to smaller runs. A new approach to setting spawning targets is being developed. It is anticipated that this new method will set targets for 2005 and beyond. How First Nations will be directly involved in this process has yet to be determined.

2.4.1.2 Skeena River Salmon

OVERVIEW

Next to the Fraser River, the Skeena is British Columbia's biggest salmon producer. The Skeena River has large stocks of sockeye and pink, smaller stocks of chinook and steelhead, rebuilding stocks of coho and relatively small depressed chum stocks.

Sockeye salmon in the Skeena originate in 28 lake systems. The most important of which is Babine Lake, the largest freshwater body in British Columbia. The Babine system currently produces more than 90 per cent of the total Skeena sockeye run. Between 1982 and 2001 the average run size for all Skeena-bound sockeye was just over 3.8 million fish, of which approximately 3.42 million were destined for Babine Lake.

Skeena sockeye returns consist of three, four and five-year-old fish and, unlike many other sockeye rivers, do not have dominant years. Runs of Skeena sockeye began to increase in number following the building of spawning channels on Lake Babine from 1965 to 1971. This initiative resulted in an approximate doubling of sockeye catches.

While numbers of returning sockeye to the Babine are strong, there are concerns about the viability of weaker runs of sockeye elsewhere in the Skeena system.

In addition, overall high Alaskan and Canadian fishing pressure has resulted in declines in coho salmon runs in the Upper Skeena. This resulted in drastic reductions in ocean fisheries beginning in the late 1990s in an effort to stop declines and later rebuild coho numbers. Severe cutbacks in Canadian fisheries coupled with improved ocean survival and declines in Alaskan fisheries lead to improvements. Increases in commercial fishing pressure have been allowed. Since 2003 the North Coast fishing plan has allowed for a ceiling of 15 per cent on the proportion of the coho total return taken by Canada.

Pink salmon returns to the Skeena were high in the 1980s and 1990s, averaging five million fish per year. Pink runs remain strong. There is not a strong year-class dominance for this species. In addition, pink salmon appear to be expanding their upriver range and in some years they have spawned in large numbers in the Bulkley/Morice system and the Babine River.

Overall, Skeena chinook salmon are rebuilding. Successful rebuilding is due in large part to the Pacific Salmon Treaty which led to reduced exploitation rates on chinook throughout the Coastal region beginning in 1985. Escapement in recent years has reached levels not seen since the 1950s. There are several large chinook stocks as well as many smaller stocks in the Skeena drainage. River systems where chinook salmon are found in healthy numbers include the Morice, Kitsukalum, Kispiox and Bear Rivers. The status of some of the Skeena system's smaller chinook stocks is not well known.

Steelhead are found in many watersheds throughout the Skeena. A minimum escapement of 26,500 has been recommended for summer run steelhead. Steelhead numbers in the Skeena system declined between about 1985 and 1992. Low escapements and allocation concerns led to changes in the timing of Area 4 commercial fisheries to decrease impacts on steelhead. It also resulted in a program of mandatory catch and release of the species in the sports fishery. Currently, populations appear stable.

Unlike river systems in nearby Southeast Alaska or south of the Skeena on British Columbia's North Coast, the Skeena does not have abundant populations of chum salmon.

CURRENT MANAGEMENT

Skeena sockeye catch and escapement by year from 1992 to 2002 is shown in Figure 16. Most Skeena sockeye are caught in gillnet and seine fisheries. These fisheries are managed based on in-season projections from an annual test fishery at Tyee in the Skeena estuary. The escapement target is 900,000. The next 150,000 sockeye are allocated for food, social and ceremonial fisheries. Most of the catch is taken by commercial fisheries but ESSR catches are significant (Figure 17). From 1992 to 2002, Alaskan fishers took 17 per cent of Skeena River sockeye catch as they approached the coast. Commercial fishers at the mouth of the Nass River, the mouth of the Skeena and in Area 5, the southern approach to the river, accounted for a further 68 per cent.

Sockeye are caught in FSC fisheries along the ocean and river migration route by various First Nations including the Haida, Tsimshian, Gitxsan, Wet'suwet'en and Lake Babine First Nations. Combined, they account for nine

per cent of the sockeye catch. An average of six per cent of the total catch was taken in ESSR fisheries. The ESSR fishery will be described in a little more detail in Section 2.5, Case Studies.

In addition to these fisheries, various monitoring and management initiatives have allowed for ESSR opportunities for sockeye. Usually, these upriver or more terminal fisheries have only proceeded in years where commercial fishing rates were purposely repressed in order to protect certain weakened stocks of sockeye, coho and steelhead. These are discussed in more detail in Section 2.5 Case Studies.

A committee consisting of aboriginal representatives – the Skeena Fisheries Commission – has developed a working relationship with the Department of Fisheries and Oceans, to the point that it is regularly consulted on proposed fishing plans by the commercial fleet before fishing activities begin.

FIGURE 16 Annual Skeena Sockeye Returns

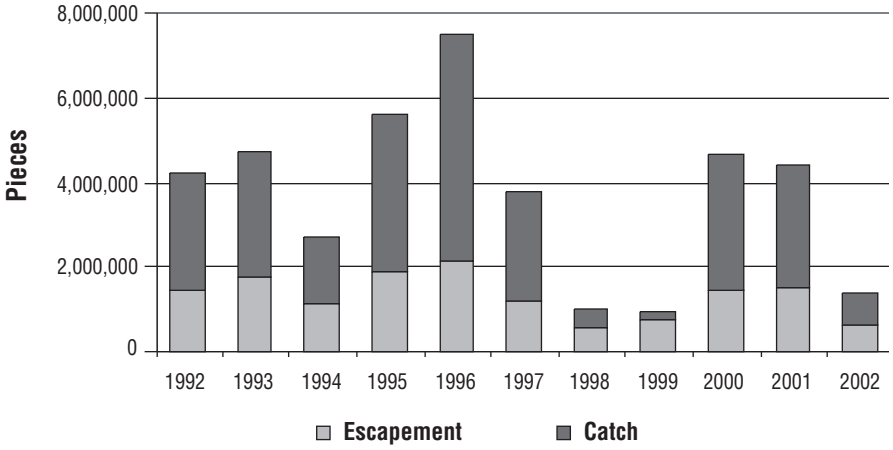
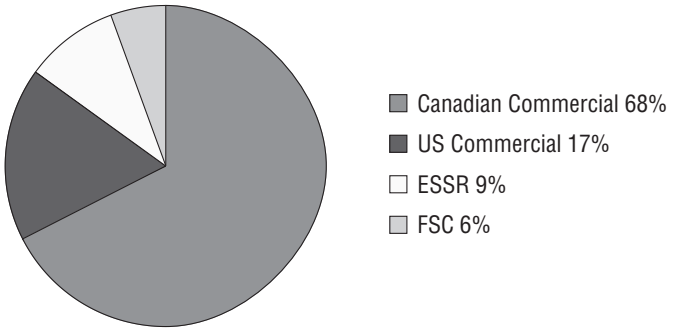


FIGURE 17 Skeena Catch by Sector



Total Over Period 1992-2002
Sport catch was too small to show on graph (0.08%).

2.4.1.3 Nass River Salmon

OVERVIEW

Next to the Fraser and Skeena Rivers, the Nass River is one of B.C.'s most important salmon producers. Sockeye are the most abundant species, followed in decreasing order by pink, coho, chinook, chum and steelhead. The annual return of all salmon species to the Nass is in the range of 1.5 to 3.5 million fish. Chum stocks are considered well below escapement goals.

Sockeye salmon originate in several lakes, with more than three-quarters of the total sockeye run occurring in the Meziadin Lake system. Sockeye escapement to Meziadin Lake averaged 174,000 since 1967 with a recent low in 1989 of about 50,000 fish, and a high of 600,000 fish in 1992.

The average run size of Nass River sockeye from 1992 to 2002 was 1.12 million, which was slightly above the long-term average (1982-2002) of 899,000 sockeye. The catch of Nass sockeye salmon has averaged 802,000 pieces or more since 1992, with a peak of 1.6 million sockeye caught in 1993 (Figure 18).

CURRENT MANAGEMENT

Nass-bound stocks are captured in coastal Alaska and B.C. in commercial seine, gillnet and troll fisheries. Salmon are caught by native and recreational fishers in the river proper and its tributaries. Nass sockeye catch by sector is shown in Figure 19.

In May 2000, the Nisga'a Final Agreement became effective when the Nisga'a Nation concluded treaty negotiations with Canada and B.C. Chapter 8 of the Agreement deals with the Nisga'a fishery, including entitlements for each salmon species, the latitude to define the catching times, locations, methods and internal allocations for both domestic and commercial sale fisheries.

A guiding principle of the agreement is to increase the Nisga'a share of the fishery, while improving management of the stocks. This is to be achieved with:

- a community held entitlement to a share of the salmon returns,
- a Joint Fisheries Management Committee (JFMC), consisting of the Nisga'a, BC and Canada,
- sustainable funding through the Lisims Fisheries Conservation Trust Fund, and,
- integrated research, management and harvesting.

The Nisga'a Treaty put the catch and management of much of the Nass fishery in the hands of the Nisga'a, with the federal Minister of Fisheries as the final authority.

2.4.1.4 Coastal Salmon

OVERVIEW

For our purposes the Coast area consists of Haida Gwaii, the North and Central Coasts, Johnstone Strait, Georgia Strait and the West Coast of Vancouver Island *(see map page 42)*. Coastal salmon stocks are made up of hundreds of small and medium sized populations returning to numerous stream and river systems throughout the area. In addition, salmon from the large mainland river systems rear and migrate throughout the coastal area.

There are a few regionally important sockeye systems including Nimpkish Lake in the Johnstone Strait area, Oweekeno Lake by Smith Inlet, Long Lake at Rivers Inlet and Kennedy Lake on Vancouver Island. These watersheds supported large commercial fisheries catches in excess of two million fish in some years. More recently, they have been depressed, sometimes to very low levels. Many smaller runs occur on hundreds of systems. Information on them is extremely limited. Many stocks are fished terminally in First Nations food, social and ceremonial fisheries. For instance, the Barkley Sound sockeye fishery on the West Coast of Vancouver Island is the largest domestic sockeye fishery outside of the Fraser River with average catches of over 400,000 from 1980-2003 including commercial landings. In the Strait of Georgia, smaller stocks such as Sakinaw Lake sockeye have declined drastically in recent years. This has lead to Sakinaw sockeye being recommended for listing as endangered under the federal *Species At Risk Act*. This listing would affect Fraser sockeye fisheries.

Chinook salmon are generally found in larger river systems. Major river systems in Coastal B.C. have several significant populations and numerous smaller river systems are home to small, genetically distinct chinook populations. Larger populations include the Bella Coola system on the Central Coast, the Campbell and Cowichan systems in the Strait of Georgia, and the Somass River on the West Coast of Vancouver Island. Some of these systems are enhanced, and the fish taken from them occur in a variety of fisheries including commercial mixed stock ocean fisheries, terminal fisheries, recreational fisheries and First Nation food, social and ceremonial fisheries. Enhanced stocks include those at Robertson Creek, Quinsam, Puntledge, Big Qualicum and Snootli (Bella Coola). Many wild chinook stocks are depressed and many smaller systems have less than 100 spawning fish.

FIGURE 18 Nass Sockeye Returns

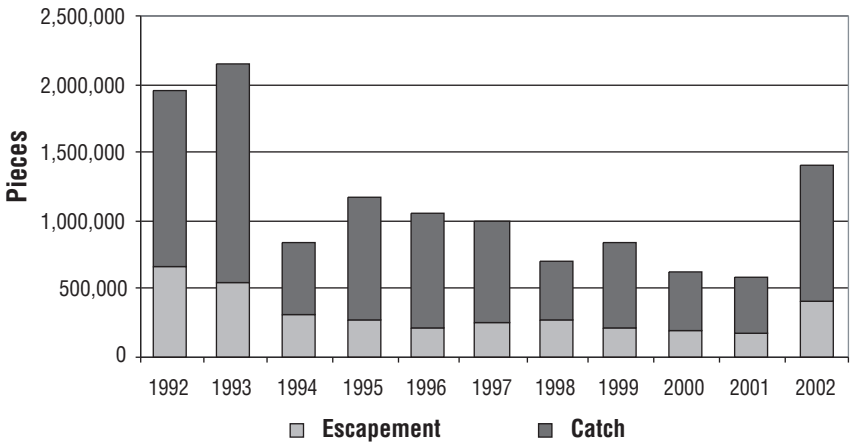
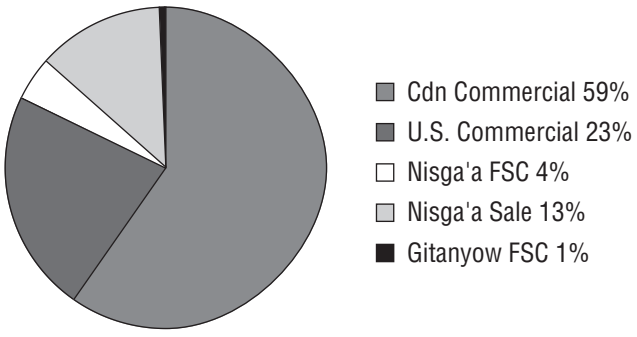


FIGURE 19 Nass Sockeye Catch by Sector



Total Over Period 2000–2002

Coho, pink and chum salmon occur in most B.C. Coastal rivers and there are hundreds of small and medium populations.

Assessment of coastal coho is difficult since they generally return over a prolonged period late in the year and spawn in less accessible areas. A few indicator stocks are monitored and provide information on migration and ocean survival. Enhancement has been a mixed blessing. For instance, up to 70 per cent of coho in the Strait of Georgia come from hatcheries. The recent downturn in wild productivity and ocean survival, combined with historically large mixed stock fisheries, has resulted in concerns about wild populations.

Chum salmon are easier to assess than coho since they normally spawn in the lower more accessible portions of streams and rivers. Most areas have a few large populations and many medium to small populations. There are several major chum hatcheries.

The Coast also has numerous populations of pink salmon. Pink runs are highly cyclic, with dominant cycles occurring in either even or odd years. Some notable major pink producers are the Yakoun, Adnarko, and Bella Coola systems. Pink runs have been quite stable when averaged over a decade. However, reduced assessment of pinks confounds estimates on the Central Coast. There are mounting concerns over interactions between sea lice outbreaks in fish farms and wild pink salmon. Links between sea lice infestation on wild salmon and fish farms are evident in Europe and there is mounting evidence of the same in B.C., particularly in the Broughton Archipelago.

MANAGEMENT

Management of salmon stocks over much of the B.C. coast has been driven by large returns of salmon to productive areas of B.C.'s major river systems. This has changed in recent years with more attention to less productive smaller populations of wild fish that co-mingle with the larger stocks.

Only a few Coastal sockeye stocks, generally the larger ones, are actively managed based on exploitation rates and escapements. Many smaller stocks that contribute mainly to First Nation fisheries are passively managed meaning that changes are not generally made to fisheries in-season.

Except for terminal areas, chinook fisheries are managed coast-wide based on annual catch limits set under the Pacific Salmon Treaty. In the late 1990s, catches in many areas were kept low due to concerns for certain wild stocks.

Up to the mid-1990s, coho fisheries were not actively managed. In recent years however, concerns for B.C. Interior coho led to severe curtailment of mixed stock ocean fisheries. Today, maximum exploitation rates for coho are set for all coastal areas.

Most pink and chum fisheries are managed terminally based on escapements. Chum in some areas are taken in interception fisheries and in the case of the South Coast, chum are managed based on a percentage catch rate. Demand for chum and pink varies with market demand. Low prices in some years have resulted in limited commercial fisheries. North Coast chum returns have been poor in recent years and have been identified as a possible conservation issue.

Steelhead are generally not actively managed.

2.4.1.5 Transboundary Rivers

There are three large transboundary river systems where salmon that are shared with the United States spawn in Canadian waters. This creates unique issues with regard to sharing and habitat protection. These issues have particular importance for First Nations in the transboundary areas.

■ Columbia River Salmon

OVERVIEW

At 2,000 kilometers in length and some 671,000 square kilometers in area, the Columbia is the fourth largest river system in North America. It is also the most heavily dammed river in the world. This explains why this once great salmon-producer is a shadow of its former self.

Historic estimates suggest that in high spawning years as many as 16 million salmon once returned to the Columbia and its tributaries. This made for a very important inland salmon fishery by First Nations for both food and trade.

The strength of that fishery, weakened considerably by years of commercial over-fishing, was thrown into a

tailspin in 1939 by the construction of the Grand Coulee Dam. No provision was made for fish passage during the construction of what remains one of the largest dams in the world. As a result, all access to 1,800 kilometers of spawning and rearing habitat along the upper river was cut off. All Upper Columbia stocks of steelhead, sockeye, chinook, and coho are extirpated.

The Okanagan River remained the only river in Canada on the Columbia system that could still be accessed by anadromous fish. The river is a 12,000-km^2 system, two thirds of which is within Canada. Historically, it supported a major sockeye fishery at Okanagan Falls and other upriver fisheries for chinook, sockeye, steelhead and coho. The future role of salmon in sustaining Canadian Columbia First Nations is precarious.

All Okanagan salmon runs except sockeye were decimated as a result of Grand Coulee dam and the Grand Coulee Fish Maintenance Project. The federal government failed to consult with the Okanagan Nation about the obviously huge negative impacts that various hydroelectric projects would have on their fisheries. From 1939 to 1943, all access upstream of Rock Island Dam was blocked, meaning migrating salmon were prevented from reaching many Columbia tributaries including the Wenatchee, Entiat, Methow and Okanagan rivers. During those years, many fish were trapped and transported. Various hatcheries took the fish in an effort to rebuild certain Columbia stocks. For the Okanagan this meant that only sockeye salmon intercepted at Rock Island Dam were maintained in the Okanagan River system.

Okanagan sockeye continue to survive in the lower Okanagan River and Osoyoos Lake. The last of six salmon species that once returned to the system, these sockeye now spawn in the river downstream of McIntyre dam and rear in the north basin of Osoyoos Lake. Past returns have been prone to volatility due to natural variations in productivity, and US fisheries in the lower Columbia River.

CURRENT MANAGEMENT

Today, in addition to sockeye, the occasional steelhead and chinook salmon are seen in the Okanagan. It is unknown whether these fish are strays from other systems, or remnant populations. The central management challenge in the area is to maintain and increase viable habitat for salmon species and to somehow encourage their migration past nine mainstem hydroelectric dams on the Columbia River before entering the Okanagan River.

■ Stikine and Taku River Salmon

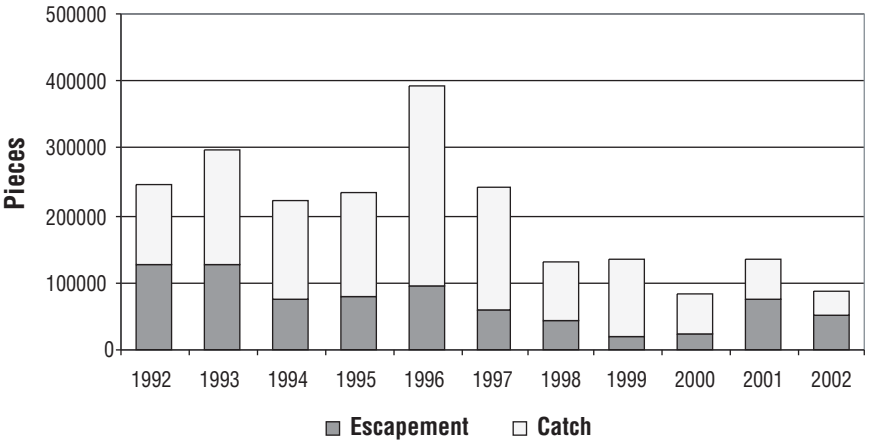
OVERVIEW

The Stikine River supports stocks of coho, sockeye, and chinook salmon. Tahltan Lake supports the main wild population. Tahltan Lake and Tuya Lake have also been enhanced by sockeye fry from fish hatcheries.

Total Stikine River sockeye returns based on run reconstruction for 1992-2002 are shown in Figure 20. The average total run over the period was 202,000 sockeye. The majority of Stikine River sockeye are caught by the U.S. gillnet fleet, troll and seine fisheries (63 per cent on average), followed by Canadian commercial fisheries (Figure 21). Over the last ten years, approximately 129,000 Stikine-bound sockeye salmon have been caught annually on average in all fisheries. The Tahltan hold ten commercial licences but they are not active. The Tahltan Fisheries Program participates in various stock assessment programs.

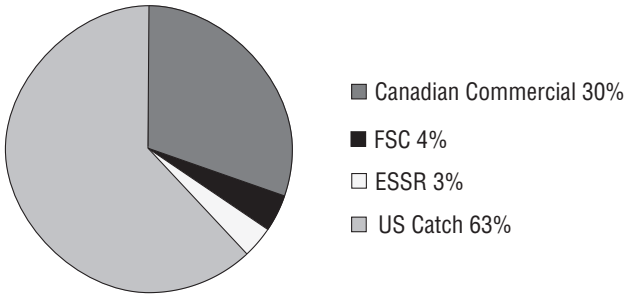
The Taku River is another major salmon river in northern B.C. Sockeye returns from run reconstructions are shown in Figure 22. Average total return over the period was 264,000 sockeye and average catch was 162,000. The majority of sockeye are caught in U.S. fisheries (80 per cent on average) followed by Canadian

FIGURE 20 Stikine Sockeye Returns



commercial fisheries in which the Taku River Tlingit First Nation participates (Figure 23). The Taku River also supports rebounding numbers of pink and coho salmon, and chinook. It also has healthy numbers of steelhead and Dolly Varden char, which are a major draw to sport fishers. About the only fish species that has been in decline in this system in recent years is chum salmon.

FIGURE 21 Stikine Sockeye Catch by Sector



Total Over Period 1992-2002

FIGURE 22 Taku Sockeye Returns

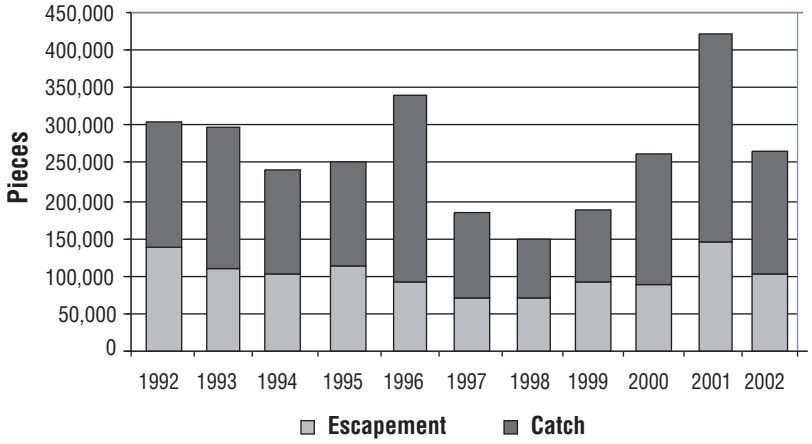
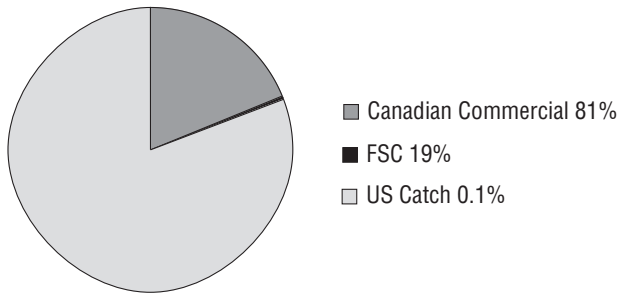


FIGURE 23 Taku Sockeye Catch by Sector



Total Over Period 1992-2002

CURRENT MANAGEMENT

Management of fish in these rivers poses significant challenges because the rivers cut across the British Columbia/Alaska border. It is important that both countries agree upon management objectives for conservation, allocation, and enhancement of various fish species. Being an international or transboundary region, salmon management activities are jointly undertaken by Alaskan, Canadian and First Nation governments. The cornerstone of the fishing arrangements negotiated in 1999 under the Pacific Salmon Treaty is the development of an abundance-based management approach.

Sharing of Stikine and Taku salmon is negotiated through the Pacific Salmon Treaty. Sharing arrangements vary by species and sockeye enhancement has been an element in the negotiations. For instance, in the Stikine both wild and enhanced sockeye returns are shared equally between U.S. and Canadian fisheries. On the Taku, Canada catches 18 to 20 per cent of the sockeye. The U.S. catches the remainder. Enhanced returns on the Taku are shared 50/50. Canada and the U.S. have committed to manage other salmon fisheries (chinook and coho) based on abundance, but have been unable as yet to reach agreement on sharing. First Nations participate in the Transboundary Panel of the Pacific Salmon Commission where management and sharing of stocks are discussed.

First Nations on the Taku and Stikine have raised concerns about salmon enhancement activities, particularly the impact on wild stocks. Hatchery-raised sockeye, outplanted to Tuya lake in the Stikine system, can't return to the lake due to impassable barriers and have been found to stray to other systems. Potential development of the Tulsequah Chief Mine on the Taku, along with the proposed construction of an associated 160-kilometre access road, has been a concern to the Taku River Tlingit. Concerns on the Stikine include a proposed mine and related road infrastructure and small hydro development.

2.4.1.6 Salmon – Trends and Issues

There is a large diversity of salmon populations throughout B.C. and numerous threats, small and large, to their long-term sustainability. Following are some of the key trends and issues affecting both the sustainability of salmon populations and the salmon fisheries that depend on them.

PROTECTION OF WILD SALMON

Wild salmon populations are essential for maintaining the long-term viability of B.C.'s salmon resources. Unlike other parts of the world, such as Atlantic Canada and even parts of the Pacific Northwest, B.C. still has thousands of wild salmon populations. DFO's draft Wild Salmon Policy (WSP) may provide a useful framework for protection of this biological diversity. The WSP may also provide a framework for responding to salmon populations before populations are at risk to avoid the consequences of statutory restrictions.

SPECIES AT RISK ACT

Three salmon populations, Cultus Lake sockeye, Interior Fraser coho, and Sakinaw Lake sockeye are already considered at risk of endangerment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). These stocks are not yet legally listed under the new federal *Species At Risk Act,* but are likely to be. This will have significant impacts on mixed stock commercial fisheries intercepting these species possibly beginning in the 2004 season. There are likely to be other stocks identified in the long term that will keep exploitation rates on some runs and stocks low.

HABITAT PROTECTION

Water use and habitat issues are of significant concern in many parts of the province. Water withdrawals for agriculture in Interior B.C. can have serious effects on fish, particularly during dry years. Urbanization, logging, agriculture and industrial developments also harm salmon habitat and water quality. While individual impacts may be small, the cumulative effect of multiple developments can alter rivers, streams and lakes, leading to lost salmon productivity.

CLIMATE CHANGE

Over the long term, global climate change is likely to have severe impacts on salmon by increasing stream temperatures and altering regional precipitation and runoff rates and timing. This will have dramatic effects on stream reaches that are important to spawning and rearing salmon. Long-term warming trends are particularly troubling for rivers such as the Fraser, which are near the southerly end of the range for sockeye.

NEED TO PRIORITIZE ASSESSMENTS

Many species and areas lack a core stock assessment framework. Funding for fisheries assessments including salmon is being reduced at the same time as needs grow for better monitoring of wild salmon populations. While it is recognized that not all of the streams and rivers can be monitored, it will be important to maintain long-term escapement records as the basis for future assessments of stocks.

ECONOMIC VIABILITY OF THE FISHERY

Salmon catches are at an all time low due in part to responses to weak and threatened stocks. Prices for B.C. wild salmon have declined from levels enjoyed in the mid 1980s. Declines are due in part to competition with production from salmon aquaculture and capture fisheries in other parts of the world.

ROLE OF HATCHERIES

Another area of concern is the changing role of hatcheries in the management of Pacific fisheries. B.C.'s hatchery program is small compared to hatcheries in the U. S. states of Washington, Oregon, California and Alaska, and in countries such as Japan and Russia. Hatchery impacts are site-specific. For instance, wild salmon stocks can be affected when fisheries target enhanced fish that are mingling with wild salmon. Hatchery production has replaced wild salmon production for some species such as the Strait of Georgia coho. Hatcheries may, however, play a useful role in rebuilding endangered stocks.

SALMON FARMING

There are also ongoing concerns about the impact that fish-farming operations have on the health and well being of wild salmon stocks. Escapes of Atlantic salmon from fish-farm pens are a regular occurrence. This may

result in certain river systems becoming colonized by these fish-farm escapees. Another major concern with fish farms has been their possible role in disease and parasite outbreaks in wild salmon stocks. One issue that is currently being investigated is a large decline in pink salmon returns to the Broughton Archipelago. Sea lice infestations have been observed on juvenile pink salmon that migrate through concentrations of fish farms in that area. Links between sea lice infestation on wild salmonids and fish farms are evident in Europe.

AVAILABILITY OF SALMON TO FIRST NATIONS

First Nations, particularly those in the Interior, have limited options for accessing salmon. Environmental fluctuations, commercial and recreational fishing pressure, and other actions far away from where the salmon spawn have contributed to the decline in abundance of certain local salmon populations.

IFQS AND PRIVATE OWNERSHIP ISSUES

Finally, proposals have been made to introduce Individual Fishing Quotas (IFQs) into the salmon fishery. Licence holders from one area have conducted a pilot quota program. The IFQ system has contributed to the success of other B.C. fisheries. However, a change such as this would have a negative effect on First Nations by further decreasing First Nations access to licenses and quota due to the inevitable increased expense required to buy into quota fisheries. The support of fishers and First Nations would be essential for this type of change.

2.4.2 Herring

OVERVIEW

Pacific herring are a pelagic species found throughout coastal B.C. They form large schools and live six to eight years. Adults first spawn in shallow coastal waters in their third year of life. They generally return to spawn in the same area in subsequent years. Herring are fed on by many other fish species including salmon and halibut. For that reason and many others, there is great incentive to manage this species in a sustainable manner.

First Nations have a long history of using herring for food, bait, oil, and herring spawn, the latter collected in sustainable fisheries involving the sinking of branches or kelp on which the herring deposit their roe.

Herring were exploited heavily in oil reduction fisheries up to the late 1960s when stocks underwent a drastic collapse. Modern commercial fisheries for herring spawn-on-kelp were developed in British Columbia in the early 1970s and Coastal First Nations had practiced commercial herring spawn fisheries for hundreds of years. Herring spawn-on-kelp is produced either by closed or open ponding. In closed ponds herring are caught by seine and put into a net pen with freshly harvested kelp. In open ponds the kelp is strung from frames that are placed in locations where herring are likely to spawn. Most of the herring catch is made up of roe herring that are caught using seine and gillnet. These fisheries are timed to catch herring when their roe content is highest. The main market for these products is Japan. In addition there are small fisheries for food and bait.

CURRENT MANAGEMENT

Herring fisheries are managed based on pre-season estimates of herring spawn in five major stock assessment areas: the Strait of Georgia, west coast Vancouver Island, the Central Coast, Prince Rupert District and Haida Gwaii. Herring assessments occur on a few minor stocks off the northwest coast of Vancouver Island and the west coast of Haida Gwaii. The number of spawning herring is estimated each season from catches and surveys of spawning fish. Each year, the catch policy for major stocks is to take up to 20 per cent of the predicted tonnage of spawners when the tonnage is above a certain "cutoff" level.

The advisory process whereby the Department of Fisheries and Oceans decides on herring management and allocation of catches is currently under review. As with other DFO processes, the advisory process has been dominated in recent years by the commercial industry, with limited involvement of First Nations and other interests.

TRENDS AND ISSUES

Herring stocks in some areas such as the Gulf of Georgia are at historic highs. At the same time, stocks in other areas such as Haida Gwaii have been at or below cutoff over the past ten years. DFO's catch policy is currently

under review. Many First Nations have expressed the view that herring populations must be rebuilt to former abundance in all spawning areas.

Management of herring fisheries has tightened considerably in the past 10 years. A new system of pool fisheries, multiple licence requirements and close scrutiny by DFO and First Nations has catches near target quotas in most areas and years.

At the same time, traditional Japanese markets for spawn-on-kelp and herring roe have decreased. A chronically weak Japanese economy and the changing food preferences of younger Japanese people explain the decrease.

On the Central Coast, the Heiltsuk Nation has established through the Supreme Court of Canada decision in *R. v. Gladstone* a legal right to take herring spawn-on-kelp for economic purposes. However, the Court did not define how the right would be implemented. Moreover, the Heiltsuk Nation and Canada continue to disagree on the quantity of herring necessary to meet Heiltsuk economic needs.

As described in Section 3 there are concerns about the health of herring stocks. In general, there is a sense that there is nowhere near enough First Nations involvement or benefit from the lucrative herring fishery and that First Nations do not play the role in assessment and management of herring stocks that they should.

2.4.3 Halibut

OVERVIEW

Halibut made up only two per cent of B.C. seafood landings by weight but seven per cent of landed value over the past decade. Halibut stocks are relatively healthy. Major changes to the fishery occurred with the implementation of an IVQ system in 1991. The lack of First Nation participation in the commercial halibut fishery remains a major issue.

Halibut fisheries were important to many coastal First Nations historically. For instance First Nation halibut catches in southern B.C. were 3.1 million pounds in the 1880s. In 2003 the First Nation share of halibut for food, social and ceremonial purposes coast-wide dwindled to 300,000 pounds. In 2003 First Nations held 26 communal and 27 individual halibut licences out of a total of 435. The proportion of quota is likely a better indicator of First Nation participation as not all halibut licences are fished.

MANAGEMENT

Halibut is considered a migratory stock and is managed jointly by Canada and the U.S. through the International Pacific Halibut Commission. The halibut stock stretches from California to the Bering Sea. The B.C. catch amounted to 16 per cent of the total in the region in 2003. Biomass is estimated each year and allowable catch is set based on biological data. An IVQ program has been in place in the B.C. fishery since 1991. Currently, between 210 and 270 boats fish for halibut, although there are 435 vessels licenced to do so. Benefits of the IVQ system have included development of fresh fish markets, higher prices and flexibility in fishing time through an almost year-round season. Disadvantages include fewer jobs and the potential for further corporate concentration. Management costs are paid by the Pacific Halibut Management Association, an association of licence and quota holders. It collects levies or fees amounting to 10 per cent of the quota of most licence holders.

TRENDS AND ISSUES

Halibut stocks are healthy, standing above the long term average because of good recruitment of young fish entering the population in the past. A gradual decline has occurred over the past few years because recruitments are closer to average.

Recreational catches are gradually increasing in B.C. and are about nine per cent of the combined commercial and recreational catch. Recently, a cap of 12 per cent of the combined catch was set for the recreational fishery with allowance for catches to increase providing catch shares are equitably transferred from the commercial sector.

Local and regional depletions have been reported. For instance, in the early days of the fishery, halibut were common in the Strait of Georgia but are rarely found there now.

A farmed halibut industry is developing that will likely depress prices, not unlike the impact on the value of wild salmon due to the global expansion of salmon farming.

The IVQ system makes it difficult for new participants to enter the halibut fishery and will increase the cost of treaty settlements. For instance the price of quota increased from about $18 to $25 per pound from 1999 to 2003. By early 2004 prices were reported to have reached about $40 per pound.

2.4.4 Groundfish and Other Finfish

Groundfish (excluding halibut) comprised 46 per cent of seafood landings and one third of seafood value in B.C. from 1992-2003. While the value has remained relatively constant at $85 million over the period, the percentage contribution has steadily declined due to increases in farmed salmon production. The groundfish catch is composed of over 60 different species that are caught by a variety of gear including trawl, hook and line and, in the case of sablefish, trap.

Licenced fisheries include trawl, sablefish, halibut, rockfish, and other species. While each fishery has its own special issues there are a number of common concerns relating to sustainability of future fisheries, certain types of fisheries, gear and management.

An intersectoral committee recently investigated how integrated management might be applied in groundfish fisheries of the future and identified challenges to the sustainability and economic viability of such fisheries.

Impediments to fisheries sustainability include:

- incomplete records of fish discards,
- deficiencies in groundfish research and assessment information,
- lack of a biological basis for many catch limits,
- inaccurate reporting of catches by species and area, and
- unsubstantiated mortality estimates for fish that are released in many fisheries.

Some fisheries such as halibut and sablefish are closer to meeting sustainability objectives. Examples of concerns include the collapse of Pacific cod stocks in Hecate Strait and serial depletion of deepwater and high-valued Thornyhead Rockfish. Rockfish are caught in many fisheries but, once they are caught in deep waters and brought to or released at the surface, many if not all of them die. In addition conservation concerns have surfaced about other species caught in groundfish fisheries. These include bocaccio rockfish (assessed as endangered by COSEWIC) and inshore rockfish. Given the large number of groundfish species caught in non-selective fisheries it will only be a matter of time before more species are placed on the SARA list.

Major changes took place in the groundfish fisheries over the past decade. The trawl fishery went to IVQs in 1997 and now has 100 per cent observer coverage funded by the industry. A unique approach was taken when IVQs were put in place in that fishery. Eighty per cent of the quota was allocated to IVQs and the remainder was set aside to be allocated based on advice from a Groundfish Development Authority made up of industry and community representatives. It was to be used to aid in regional development including attainment of market and employment objectives and sustainable fishing practices.

Challenges to economic viability include a patchwork licencing scheme, expected losses of fishing area due to establishment of protected areas, overcapacity of the fleet and increasing management costs. The current licensing regime is fraught with problems in that it allows too many vessels to fish and results in high discards of non-target species.

Further challenges lie ahead including, in one scenario, the prospect for single groundfish licences, with 100 per cent at-sea monitoring and transferable IVQs.

2.4.5 Shellfish

OVERVIEW

Shellfish, including invertebrate, fisheries have developed rapidly over the past thirty years. In the past decade, they accounted for 10 per cent of the landed value of B.C. seafood and 14 per cent of the landed weight. The highest value fisheries are Dungeness crab, geoduck clam and shrimp (Figure 24).

Many shellfish do not move far, which makes localized populations susceptible to over-fishing and depletion. It also makes it difficult to assess the overall health of stocks.

MANAGEMENT

Dive fisheries for geoduck and horse clams, red and green sea urchin and sea cucumber are managed using IVQs. Most management costs including stock assessments are paid for by industry. Other fisheries are managed using a variety of controls that limit effort and catch. Dungeness crab, prawns and shrimp have transferable licences with time, area, size and trap limits. Industry advisory committees and associations meet with DFO regarding management issues and also fund some management services. Manila, littleneck, and butter clams have individual, non-transferable licences. As well, there are a few communal aboriginal clam licences involving the Nuu-chah-nulth, Haida and Heiltsuk, again with time, area and size limits. A coast-wide committee and several area management boards exist. Oysters are managed by individual non-transferable area licences granted by the Province. A rigorous assessment process was put in place for new and developing shellfish fisheries a few years ago and several fisheries including octopus, Tanner crab and goose barnacles were required to go through it.

TRENDS AND ISSUES

Trends and issues for shellfish vary widely depending on species.

Managers have not had the resources to deal with the many expanding and developing fisheries. This has spurned the move toward IVQs and requiring licence holders to pay management costs. Low value fisheries such as clams have difficulty meeting these standards.

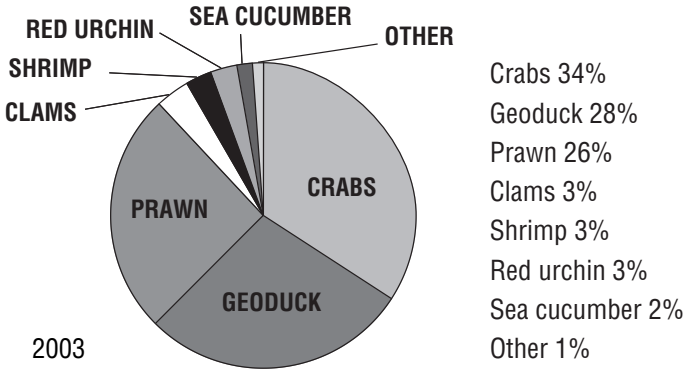
Many shellfish are filter feeders, making the maintenance of water quality a high priority. Currently, there are many shellfish closures due to sewage discharges, particularly on the South Coast. Some areas in the vicinity of pulp mills have also been closed due to dioxin contamination. Another health risk is the bioaccumulation of toxins in shellfish that can cause Paralytic Shellfish Poisoning or Amnesiac Shellfish Poisoning. Only a small portion of the Coast is monitored, mainly where commercial fisheries occur. The lack of more widespread monitoring may pose health risks for First Nation and recreational harvesters in more isolated areas.

About 80 to 90 per cent of shrimp are caught by trawl offshore of Vancouver Island and the biomass fluctuates greatly. Issues include overcapacity and the bycatch of oolichan which are depressed and support important First Nations fisheries.

Development of new fisheries is difficult given the high standards for approval of new and developing fisheries. This has frustrated those interested in goose barnacle fisheries, for example.

IVQs and licencing for shellfish species has also made it difficult for new people to enter the fishery. Availability of some licences such as geoduck is extremely limited.

FIGURE 24 Shellfish Landed Value by Species



2.5 Case Studies

This section of the report looks at four examples in three different jurisdictions where attempts at shifting portions of fisheries allocations to indigenous people for economic purposes have been made. Given the context of this report and the work of the McRae/Pearse task group, it is worthwhile considering what has been achieved by way of significant changes in fisheries allocation and/or management in places where indigenous people have had outstanding grievances and where governments, either in response to court decisions or in anticipating increased litigation, have chosen to chart new courses.

The four examples are chosen for different reasons. The first, Northwest Washington, is chosen because it is adjacent to British Columbia. And because it has experienced a very significant change to fisheries allocation as a result of court rulings on what tribes in the Northwest quarter of that state were entitled to under the terms of treaties they had signed. The second, involving Maori interests in New Zealand, is chosen because it shows how a significant reallocation of fisheries resources came

about as a result of strong reactions to proposed government and commercial fishing initiatives that threatened to alienate fisheries resources from the Maori. The third and fourth examples come from British Columbia. They were chosen because they put communal allocations of fish in the hands of a limited number of First Nations for commercial purposes. In the case of the Nisga'a Treaty, the Nisga'a commercial fishery has been in place since 2000. In the case of Pilot Sales fisheries, First Nations benefited from these catch shares for nearly a decade. But the program has subsequently been discontinued as a result of competing court decisions, leaving many to wonder what the federal government believes should be done to address outstanding First Nation concerns in advance of treaties.

2.5.1 Northwest Washington Tribes: Half the Salmon

Disputes between treaty tribes and the U.S. government over sharing of salmon in Washington State were resolved by the courts in what became known as the *Boldt* decision in the 1970s. Subsequent actions by the tribes, the State and Federal governments provide insight into development of workable arrangements for fisheries sharing, management, conflict resolution and economic development. Following are some details of how aboriginal fishing rights protected under treaties were implemented in Washington after the *Boldt* decision.

SHARING THE RESOURCE

For almost a century, political and economic considerations had taken precedence over the tribes' mid-19th century treaty rights. Some 19 tribes in five treaty areas had been isolated from most fisheries even though the treaties guaranteed access. They were also excluded by the state from fisheries management. The tribes struggled politically and in the courts to get recognition of their right to fish.

Finally, in 1974, Judge Boldt ruled that the northwest Washington tribes "were entitled to catch 50 per cent of the harvestable fish" swimming through their waters. The decision created a furor among State politicians and commercial and recreational fishers and was challenged in the courts. But in 1979, the US Supreme Court upheld Judge Boldt's decision. With the tribal share of the fishery affirmed, the various players in the fishery then got on with the challenge of how best to manage the fishery.

MANAGING THE RESOURCE

The court decision required the State and the tribes to coordinate their efforts to implement tribal fisheries. While Judge Boldt generally left it to the tribes to organize how they would manage their share of the fishery, he did establish some tribal criteria with regard to determining who was an eligible tribal fisher; the registration of tribal vessels; and their catch-monitoring and accounting system. He also reserved a power to supervise how the state would deal with the new management regime. Judge Boldt also understood the international management implications of his decision with regard to Fraser River-bound salmon passing through international waters. In order to implement the decision in this context, the tribes organized themselves as briefly described below.

NORTHWEST INDIAN FISHERIES COMMISSION (NWIFC)

About 19 tribes belonging to five treaty areas created a coordinating body in 1974, the NWIFC, to oversee fisheries management. Each treaty area chose one commissioner as their representative on the NWIFC. The five commissioners met monthly and made decisions by majority vote. The NWIFC's major goals were to protect and coordinate members' treaty fishing rights; provide technical advice and coordination for tribal management purposes; and promote goodwill amongst the Indian and non-Indian public.

The federal government provided the NWIFC with a sizeable annual budget, beginning with $700,000 in 1974. These funds were used to develop regulations for off-reserve fishing, gain expertise in enforcement, and obtain equipment to generate and analyze data needed to manage the fishery among other things.

The NWIFC remains an important organization for the tribes. It has reorganized several times since 1974 and today has 20 member tribes and nine commissioners. It organizes and coordinates fishery management programs and services. It assists with policy development, provides data, quantitative analysis tools and technical aid in natural resource management for the tribes, and it conducts public relations. It also helps facilitate tribal participation in regional and international bodies such as the Pacific

Fisheries Management Council and the bi-lateral Canada-U.S. Pacific Salmon Commission.

TRIBAL ORGANIZATION

Each of the 20 tribes regulates and coordinates its own fishery at "usual and accustomed" fishing grounds. Each tribe also has a fishery manager who oversees staff involved in management, enhancement, habitat protection and enforcement. Tribal fish committees strive to balance catch needs and resource availability. Tribes sometimes advocate their own interests or needs in NWIFC meetings. At other times, tribes with similar interests or concerns join in common cause. Decision-making is usually by consensus, and sometimes by recorded vote. The NWIFC strives to act as a facilitator with regard to tribal issues or differences.

Tribal representatives hold seats on the Pacific Fishery Management Council (PFMC) and on the bilateral Pacific Salmon Commission (PSC). With the PFMC, tribal representatives are involved in developing and monitoring fishery management plans in the offshore fishery, while through the PSC they are involved in policy and decision making with regard to the Pacific Salmon Treaty.

CONFLICT MANAGEMENT

In his 1974 ruling, Judge Boldt left the issue of internal fish allocations to the tribes. This was bound to result in disagreements as the tribes regained and expanded their fisheries. Unfortunately, disputes arose resulting in flurries of crisis negotiations, litigation between tribes and emergency court orders.

The tribes recognize the merit in governing their fishery in an orderly way. However, instituting fairness and equity into fishery management is difficult. The tribes have considered a variety of criteria that could be underlying principles for guiding the resolution of disputes. Principles reflect various views of equity and efficiency. Seven of the principles continue to be discussed. These are

- shares proportionate to the tribe's size,
- shares proportionate to the number of fishers in the tribe,
- shares based on recent historical catch and / or dependency on the fishery,
- one tribe/one share within each region where a tribe has its 'usual and accustomed fishing places',
- shares based on investment in hatcheries or protection of fish habitat,
- shares proportionate to efforts and or investments by each tribe in pursuing litigation and other means to increase the overall tribal share, and
- shares proportionate to the relative quantities of fish taken at treaty time.

Two more principles — Individual Transferable Quotas (ITQs) and Open Competition — have generally been rejected. Despite the lack of agreement on some overarching principles, the tribes have managed to deal with most intertribal conflicts as they arise.

The tribes have struggled with intertribal allocation, both in terms of area and in terms of catch. This remains an issue, but in the early 1990s, the tribes dealt with allocation issues through a mediation and arbitration process that established an intertribal sharing plan. The plan has since expired, but its principles continue to guide discussions.

ECONOMIC DEVELOPMENT

After the *Boldt* decision, development of the fishery by the Lummi, one of the larger tribes, was studied in some detail. David Boxberger, an anthropologist, characterized the way the tribal fishery developed as one of underdevelopment, which means not meeting its full potential. He noted that overcapitalization occurred in the Lummi fishery similar to the licenced state fishery that existed before it. Competition in the fishery both between tribal members and between tribes led to conflict and difficulty in coordinating tribal activity for the overall benefit of the community. A few people were well off but most people did not make a reasonable living from the fishery. He makes the statement that "The Lummi fishery is making millions of dollars but the Indian people are impoverished." He attributes these responses to a history of dependency on the state and a lack of consideration of alternative models for the fishery at the time that fish allocations were made. This highlights the need to consider from the outset how fisheries will be structured and managed for overall community benefit.

Economic development is difficult for the tribes. In general, the markets are so poor, that even when the fish

runs are up for the tribal fisher, the real value is virtually non-existent after taking into account fixed costs such as fuel, insurance, etc. Within the last decade or so, the tribes were awarded an equal share of the state's groundfish and shellfish fisheries. As a result, many tribal fishers have shifted from catching salmon to groundfish and shellfish.

2.5.2 The Maori and News Zealand's Quota Management System

New Zealand's Quota Management System (QMS), which established ITQs throughout the commercial fishery, was promoted by economists and government officials in the early 1980s as a strategy to reduce government's fisheries management costs, reduce the size of the fleet, and spread catches over the year for improved marketing. Some of the system's biggest advocates were segments within the commercial fishing industry who were lobbying for stronger property rights in the face of Maori rights and claims. Indeed, the introduction of the QMS coincided with the growth of a legal and political struggle by the Maori to have their rights to access and manage fisheries for domestic and commercial purposes legally recognized.

Despite Maori opposition, and a recommendation by the government-appointed Treaty of Waitangi Tribunal that Maori rights be settled first, the New Zealand government implemented the QMS system in 1986. The new rules applied to 29 species totaling 80 per cent of the commercial catch. The Maori reacted strongly with political and legal pressure, and secured a court injunction in 1987 to halt further introduction of the QMS. As a result, it became obvious that the QMS could not succeed in increasing industry stability without addressing Maori interests.

While the government and commercial fishing sector still wished to proceed with the QMS, a combination of Maori court victories and rising public support for the Maori position forced them to consider a negotiated settlement. After several failed attempts at negotiation, the New Zealand government passed legislation to address Maori interests. In the meantime, efforts continued to be made for a negotiated settlement. The legislation established the Maori Fisheries Commission. The Commission was mandated to purchase 10 percent of existing quotas over four years. The legislation also provided the Maori with protection of specific fishing areas as "sources of food for spiritual and cultural reasons."

Despite the legislation, legal and political pressure from the Maori continued, and the New Zealand government agreed not to introduce further species into the QMS until an agreement was reached. After several years of negotiations, an opportunity arose in 1992 to purchase Sealord, a company with significant holdings in New Zealand's QMS fisheries. This proved to be a breakthrough. The New Zealand government agreed to purchase half of the company for the Maori. In one fell swoop, the Maori ended up owning almost one quarter (23 per cent) of the quota in the QMS system.

The Sealord deal was instrumental in bringing the parties closer to a final agreement. In 1992 the *Settlement Act* was passed, guaranteeing the Maori 20 per cent of quota for new species introduced into the QMS. It also gave Maori representatives seats on fisheries statutory bodies, recognized the special relationship between the Maori and the Crown, and ensured customary fishing rights. The majority of Maori, in return, accepted the settlement as full and final resolution of their outstanding fisheries claims.

Subsequent years have seen the Maori Fisheries Commission building Maori fisheries assets and programs, and working out many of the details in the *Settlement Act.* Through careful investments and business management, the Maori now control an estimated 40 per cent of the New Zealand seafood industry, including processing and aquaculture operations. The foremost issue remaining to be resolved is the sharing of settlement benefits among various Maori tribes. After a decade of consultation, negotiation, and litigation, legislation is now being passed to resolve Maori inter-tribal allocations. Another major challenge remaining is how the Maori's customary fishing rights are to be respected, as these rights take a priority over all commercial allocations and are meant to be managed separately.

2.5.3 The Nisga'a Fishery – A Post-Treaty Fishery and Management System

The Nisga'a fishery is an integral part of the Nisga'a Final Agreement that came into effect on 11 May 2000. It is the only example of an operational post-treaty fishery in British Columbia. The treaty negotiation process provided the parties with ample opportunities to discuss and evaluate alternative approaches to defining catch allocations and the management of the Nisga'a fishery. This process included the development of the Nisga'a fisheries Program that provided critical information for negotiators and an opportunity to test various monitoring and stock assessment systems that would be required to successfully implement a treaty.

THE NISGA'A FINAL AGREEMENT AND RELATED AGREEMENTS

The Nisga'a Final Agreement defines the catch allocations, fisheries management structures and financial commitments related to Nisga'a fisheries and Nass area stocks. Other treaty-related documents provide the detailed operational understanding of how to deliver on various treaty provisions. The parties agreed that many of the details discussed during the negotiation process should be recorded but should not be included in the Final Agreement because they were part of an evolving management and stock assessment system. For example, the Final Agreement calls for the establishment of the Joint Fisheries Management Committee (JFMC) and defines the list of responsibilities of this Committee. A Fisheries Operation Guidelines document describes how the JFMC will carry out each of its responsibilities and defines the Joint Technical Committee (JTC) that is the operational arm of the JFMC. Many of the other details related to the seasonal management and assessment of Nass area salmon stocks are described in the Fisheries Operation Guidelines to help guide the individuals responsible for implementing the Nisga'a Final Agreement. Similarly, the enforcement procedures related to Nisga'a fisheries are defined in the Nisga'a Enforcement Agreement. Federal fisheries officers and BC Conservation officers have the authority to enforce Nisga'a laws and regulations. A Joint Enforcement Committee (JEC) was established to facilitate the implementation of the Enforcement Agreement.

The Nisga'a Final Agreement includes formulas that define the Nisga'a share of the Canadian catch of Nass area salmon stocks and allows for the sale of some or all of the catches from Nisga'a salmon fisheries under specific conditions. On average, the Nisga'a salmon allocation represents just over one quarter of the Canadian catch of Nass area stocks. The Final Agreement also:

- defines Nisga'a entitlements to oolichan and intertidal bivalves (i.e. clam, cockles and mussels),
- establishes a $13 million trust fund to promote the conservation and protection of Nass area fish species,
- facilitates the sustainable management of Nass area fisheries, and
- supports Nisga'a participation in the stewardship of Nass area fisheries resources for the benefit of all Canadians.

The Nisga'a also received $11.5 million to purchase commercial fishing vessels and licenses.

TREATY IMPLEMENTATION

The Nisga'a Treaty is currently in its' fourth year. The fisheries component of the treaty has been implemented as defined in the Final Agreement, Nisga'a Harvest Agreement and other related documents. The authority to implement the Nisga'a fishery flows from the Final Agreement and federal *Fisheries Act* through the Nisga'a Annual Fishing Plan (NAFP) to Nisga'a Lisims Government. The NAFP defines the escapement goals required to guide management decisions for Nass salmon stocks, calculates Nisga'a allocations for each salmon species and the general regulatory requirements for catches of each fish species. The NAFP is reviewed by the JFMC prior to being submitted to the Minister for approval. Nisga'a Lisims Government is responsible for the internal allocation of catch opportunities between Nisga'a fishers and day to day operation of the Nisga'a fishery.

The Nisga'a have distributed their salmon catches between three types of fisheries: domestic fisheries for food, social and ceremonial purposes; communal sale fisheries where the proceeds are used to support fisheries management programs and individual sale fisheries which provide commercial catch opportunities and income for Nisga'a fishers. The portion of the annual Nisga'a salmon catch taken in each of these fisheries

varies between years and between species depending on stock abundance and Nisga'a preferences. For example, the Nisga'a have chosen to focus their commercial fisheries on the abundant sockeye and coho returns, not permit the sale of chinook salmon and minimize their catch of chum salmon to promote the restoration of these stocks.

Each year, in-season information on run size and Nisga'a catches provides the DFO and Nisga'a managers with the information needed to ensure that catches are consistent with allocation formulas and escapement goals. Generally, all technical issues that arise during the fishing season have been handled by the JTC and enforcement issues are handled by the JEC. Once the fishing season is complete, the JTC prepares an annual management report that is submitted to the JFMC for approval prior to formulating plans for the next fishing season.

Prior to the signing of the Nisga'a Final Agreement, several groups demanded access to JFMC meetings and expressed concern for the post-treaty management of Nass salmon stocks. In the four years of treaty implementation:

- the Nisga'a and DFO have given regular updates on Nass area fisheries in a number of forums including B.C. North Coast and Pacific Salmon Treaty meetings,
- the Nisga'a have not received one request from any group for access to JFMC meetings,
- the Nisga'a Fisheries Program has provided all the information required to manage the Nisga'a fishery and assess Nass area stocks,
- there has not been a single substantial fisheries dispute between the parties,
- the Nisga'a catches have been consistent with their allocations, and
- salmon escapements have exceeded the minimum escapement level for all species and the escapement goals have been achieved for sockeye, chinook, coho and pink salmon despite large variations in abundance.

The Nisga'a Final Agreement and Nisga'a Fisheries Program currently provides Nass area salmon stocks with a greater degree of protection from over harvesting than most, if not all, other B.C. salmon stocks. At the same time, it provides substantial employment to the Nisga'a in the catching and management of their fish resources.

2.5.4 Pilot Sales in British Columbia

The 1992 DFO Pilot Sales program had its origin in conflicts over First Nations sale of fish in several areas including the lower Fraser River. The emergence of the Aboriginal Fisheries Strategy (AFS) as a response to the 1990 Supreme Court decision in *Sparrow* created an opportunity to try to address this issue although the court had been silent on aboriginal commercial fishing rights. In response to *Sparrow*, and knowing a sales component would be required to achieve any agreement in the lower Fraser, DFO offered the Pilot Sales Agreements.

The objectives of the AFS were to ensure that the aboriginal right to food, social and ceremonial fish was met, to provide aboriginal communities with a management role in the fishery, and to provide increased capacity and economic benefits to aboriginal people. The program included a provision for three pilot projects for the commercial sale of salmon in the lower Fraser, Alberni Inlet and lower Skeena areas.

First Nation organizations participating in year-to-year Pilot Sales Agreements included the Lower Fraser Aboriginal Fisheries Commission (representing the Sto:Lo, Musqeam, and Tsawwassen), the Tsu-ma-uss fisheries in Alberni Inlet (representing the Tseshaht and Hupacasath, two Nuu-Chah-Nulth First Nations), and the Tsimshian Tribal Council, Gitxsan and Wet'suwetén Watershed Authority (GWWA), and the Nato'oten in the Skeena watershed.

Catches in two of the Pilot Sales fisheries from 1992 to 2002 are shown in Figure 25 and Figure 26. Catches fluctuate because allocations depended on run size and there were not agreements with all First Nations in all years. ESSR fisheries in the Skeena resulted in significant catches of fish on six separate occasions beginning in 1993, ranging from 42,276 pieces caught in 1994 to about 784,000 pieces in 2000. There were no fisheries in three years due to poor returns. The fisheries showed local First Nations caught and successfully marketed a good portion of the total commercial catch, leading to more calls for ESSR opportunities, including pink salmon.

The Pilot Sales Agreement generated employment and income in the participating First Nation communities. Information on the value of the catch was not available aside from an evaluation of the 1993 fishery by Gardner Pinfold Consulting Economists Ltd. That study estimated that the three fisheries had a wholesale value of $5.2 million and a landed value of $2.4 million in 1993. Harvesting costs in the lower Fraser fishery were estimated to be considerably below those in the Gulf of Georgia commercial fishery. The Pilot Sales fisheries provided employment for 1,273 First Nations people combined in fishing, processing, administration, enforcement and monitoring. It approximately doubled the number of individuals earning incomes from fishing in the three test areas. That compared to $195 million for the B.C. commercial wild salmon fishery which employed 22,800 people in 1993.

It is important to note that none of the Pilot Sales came at the expense of other interests in fisheries. In the lower Fraser, for instance, Pilot Sales allocations were negotiated and a large portion came from a buyback of commercial licences by the federal government. In the case of the Skeena region, Pilot Sales Agreements were conducted under ESSR licences based on excess production that could not be caught in commercial fisheries at the river mouth.

In 2003 a BC Provincial court ruling, *R vs. Kapp,* held that the Pilot Sales Program discriminated against non-native fishers contrary to the equality provisions of the *Charter of Rights and Freedoms.* On this basis, the Pilot Sales program was immediately terminated and participating BC First Nations no longer had the ability to sell fish for economic purposes. The *Kapp* decision is now under appeal.

FIGURE 25 Lower Fraser Pilot Sales

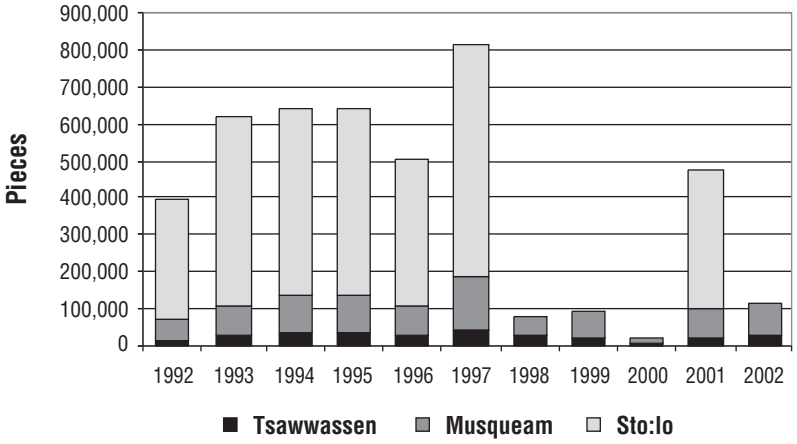
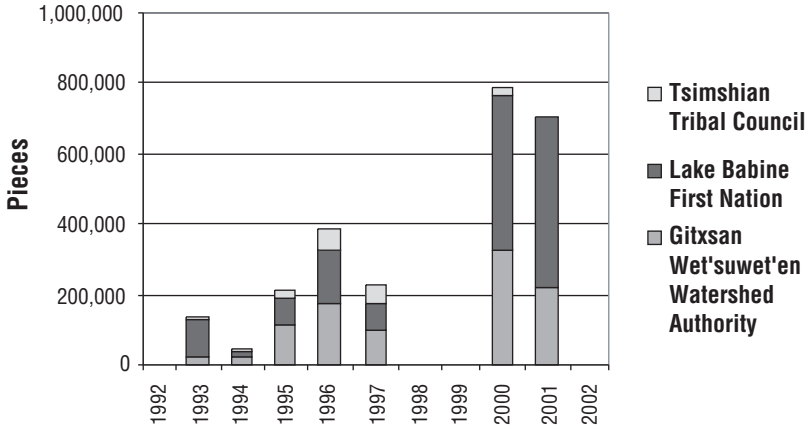
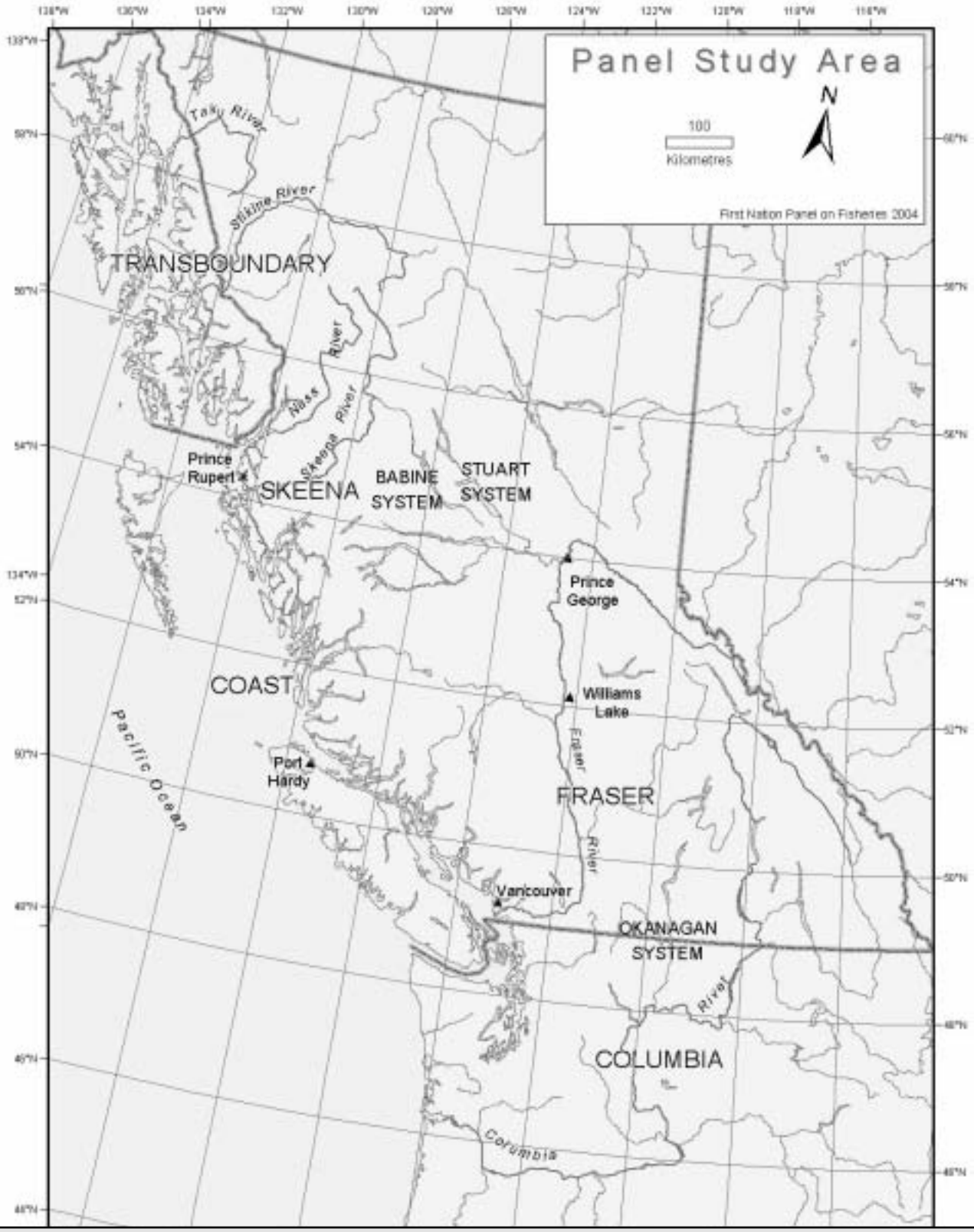
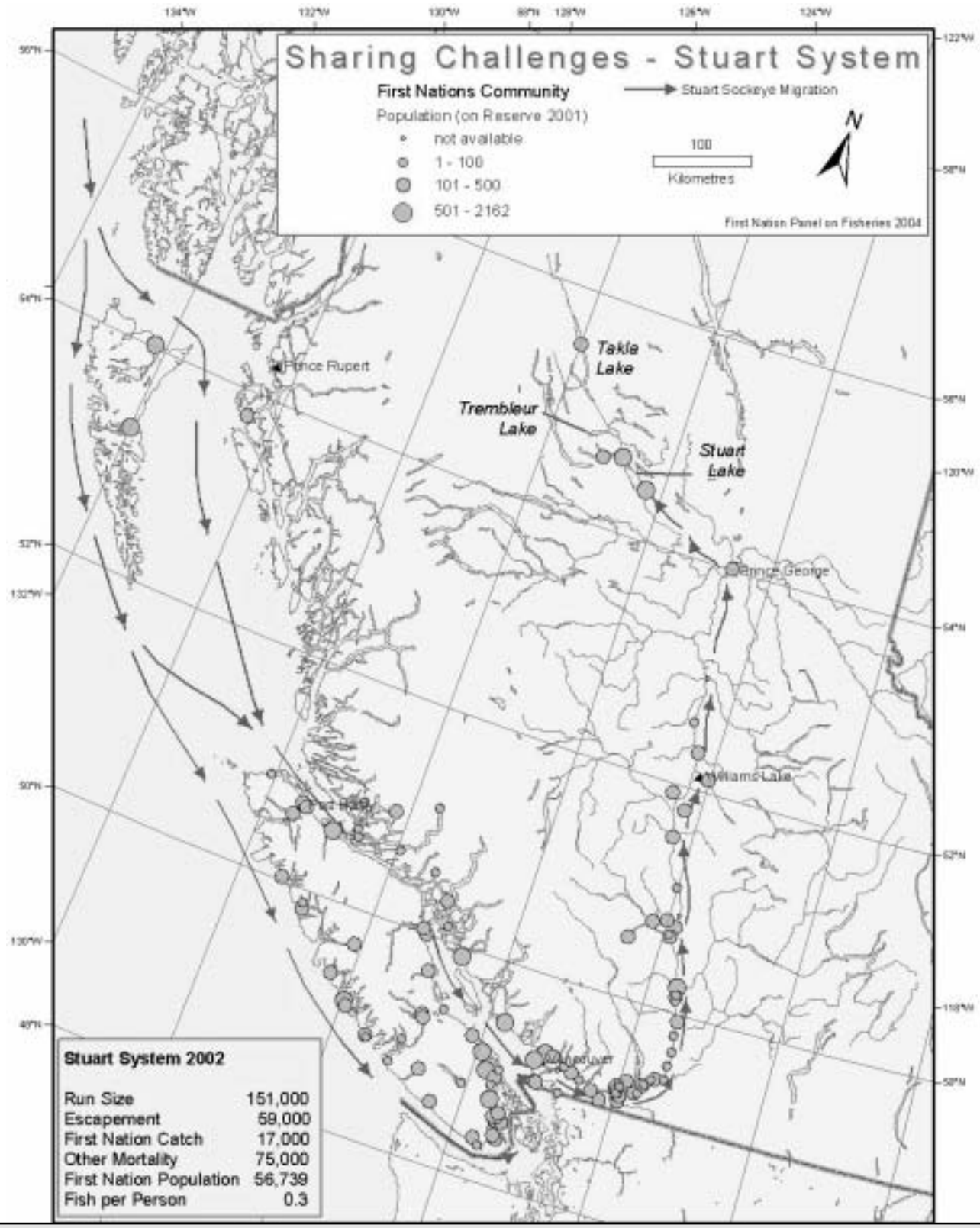


FIGURE 26 Skeena ESSR Catches by First Nations





THE FIRST NATION PANEL ON FISHERIES considered fisheries issues in coastal B.C., a number of major river systems in the province (the Fraser, Skeena and Nass Rivers), and three transboundary rivers, the Columbia, Stikine and Taku. Map 1 (left) shows the main rivers. Map 2 (right) is published to give the reader a sense of the enormity of the challenges facing First Nations sharing passing fish stocks. Fisheries management is complex, particularly in those cases where salmon migrate long distances to their spawning grounds. Further issues can complicate management including diminished run sizes and the sharing of fish among many interests. The accompanying map and data on sockeye returns to Stuart



Lake graphically illustrates this point. These highly valued fish are accessible to over 56,000 Interior and Coastal aboriginal people as they make their way from the ocean to their freshwater spawning grounds. They are also highly prized by commercial fishers in Canada and the U.S. As shown in the corner of the map, returns of early and late run sockeye to the Stuart system were poor in 2002 with escapements below target. Due to mortality en route and fishing pressure by commercial interests, the total combined catch by First Nations was only about 17,000 sockeye. This highlights why it is imperative that coordinated management and sharing between First Nations and other interests as well as among First Nations occurs.

3 What We Heard

DURING PUBLIC MEETINGS IN KAMLOOPS, PRINCE RUPERT, SMITHERS, Prince George, Fort Rupert, Nanaimo and Chilliwack panel members heard from numerous First Nation leaders, fisheries managers and advisors. Many people took this opportunity to speak before the Panel and to make written submissions sharing a wide range of concerns about fisheries management and allocation issues.

This report cannot do justice to the wide array of views expressed or all the suggestions made to improve fisheries. However, the Panel did its best to see that the major topics of discussion were addressed in this report. Based on a review of presentations, the Panel identified nine key areas of concern. The following section addresses each issue of concern, and quotes liberally from various people and organizations to appear before the Panel or make written submissions. While the use of quotes is admittedly selective, the Panel has done its best to try and represent a broad cross-section of views both by region and Nation and to highlight how, in many cases, people held similar views on similar topics.

Copies of all written submissions received by the Panel are available from the B.C. Aboriginal Fisheries Commission for a nominal fee.

Now to a discussion of what the Panel heard.

FOOD AND SOCIETAL ACCESS

For thousands of years, aboriginal people in present-day British Columbia have lived in communities close to fisheries resources, managing them in a sustainable manner and deriving great benefit from them. As Ken Malloway, a Sto:lo hereditary chief simply put it: *"Our bones are made of fish."*

Based on physical and cultural evidence of continuous use of fisheries resources for thousands of years, aboriginal people enjoy a constitutionally protected right of access to fish. This right is superceded only by conservation. In other words, all other users of fisheries resources gain access after, and only after, conservation and aboriginal needs have been addressed.

Many people who appeared before the Panel said that fisheries allocations for food, social and ceremonial purposes (sometimes referred to as FSC, home use or domestic use) are inadequate and far below what were historically available. The reasons for the lack of fisheries resources for FSC purposes are many and varied. The following observations serve to highlight both the depth of feeling on this issue and some of the underlying causes.

In Fort Rupert, Basil Ambers told the Panel:

"We have people especially elders who never get a sockeye because there isn't enough to go around ... This year I only got 15. I need more than that to satisfy my need for salmon. One year I had nothing. I know a lot of people that has happened to."

"We're even running out of cod now. We used to be able to go out for two to three days to get enough cod to last through the winter … [It's the] same with

halibut. It's all different now. I haven't had halibut for two years."

On southeastern Vancouver Island, Chief Harvey Alphonse of the Cowichan Tribes said:

"When I was a boy there was an abundance of salmon, crab, prawn, herring, sea urchin, halibut, sea cucumber and geoduck in Cowichan territory. And what was abundance to my young eyes then, was little in comparison to what our elders and historical records tell us. But today, it doesn't matter how old your eyes are, or what your background is, it is plain for anyone to see the fish are in trouble."

In the Interior at Smithers, Bryan Williams of the Gitanyow said:

"We have done no food fishery on the Kitwanga sockeye for fifty years. We have conducted habitat studies as a result: radio tagging to determine where fish are spawning in the lake; identifying where the spawning habitat is; the health of the sockeye (based on size); developing selective harvesting means (e.g. fish wheel). We rely on Nass River sockeye for food and future economic opportunities."

And in the southern Interior, Kowaintco Michel, of the Nicola Tribal Association said:

"Under large scale commercial fisheries huge holes are created in the fishery as it continues upriver which often restricts access to FSC fish, particularly when DFO issues opening times that coincide with the large holes."

The reasons why insufficient fisheries resources are available are complex and involve many different factors.

Gordon Twance Jr. of Fort Rupert noted that fish openings are dictated by market forces and that those openings are not designed to ensure First Nations have adequate, let alone priority access to, fish for FSC purposes.

Judith Sayers of the Hupacasath First Nation echoed those concerns saying:

"DFO does not manage the fishery so that we are ensured our quota before commercial allocations and [they] often do commercial openings before we begin our allocation, or while we have only a small part of our allocation."

In addition, Twance said, many people in his community no longer have the boats or the resources to go out and get fish in commercial fisheries. *"We're not out there anymore,"* he said. This was echoed by Shawn Atleo who said on behalf of the Nuu-Chah-Nulth Tribal Council that First Nations now often have to resort to contracting commercial vessels to supply food and ceremonial fish and shellfish to their villages.

Still others, like the Cowichan Tribes' Chief Harvey Alphonse, said that sufficient allocations of fish for FSC purposes are often denied because the commercial and recreational fishing sectors are better able to push their interests before government regulators. *"It … becomes a function of the relative lobbying power of each group, which puts First Nations at a disadvantage. One, we do not have the resources to compete with other groups. Second, the other groups are sole issue organizations – fish – while First Nations have multiple issues they must address simultaneously, all competing for limited time, personnel, financial and legal resources."*

Closely linked to concerns about access to fish for FSC needs, are questions relating to growing populations. The majority of people to appear before the Panel spoke of this issue, saying their communities are rapidly growing. Yet the allocations proposed in treaty processes do not reflect this reality.

Richard Watts of the Tseshaht First Nation on Vancouver Island noted that in 1972 the Nation had 200 members. *"Today, we're over 800."* Each of those people enjoys the same rights to fish. And allocation decisions need to reflect that. In other words, if there is an increasing need for fish for FSC purposes, there must be a corresponding increase in access to stocks or a decrease elsewhere in the system to accommodate that.

ABORIGINAL RIGHTS

Closely linked with the above issue, most people to appear before the Panel expressed the strong opinion that the federal and provincial governments do not adequately recognize or respect aboriginal rights to fish.

The Panel heard a wide range of opinions on this important subject. In addition, it commissioned a legal review of the relevant case law and possible future directions in aboriginal fisheries litigation in British Columbia.

Many people to appear before the Panel expressed frustration that despite court rulings, there continues to be little change in their lives.

As previously stated, many First Nation leaders are decidedly uneasy about placing allocation caps on food, social and ceremonial fisheries for the simple reason that it limits their rights.

Robert Dennis, chief councilor of the Huu-ay-aht First Nation, was typical in this regard:

"Our aboriginal right to harvest marine resources has no allocation cap but is determined by what abundance of marine resources the creator puts here. The greater the abundance – the greater the harvest. The greater the population the greater the need for more marine resources."

Others spoke of the need to ensure that rights are respected on a site-specific basis. This is extremely important, several First Nation leaders emphasized, because many fish stocks that individual First Nations have historically relied on have been weakened, in some cases to the point of extinction or near extinction due to ill-advised management decisions, often involving mixed stock fisheries in open water. Under such circumstances, a weakened stock co-migrating with a stronger stock can be captured to the point where few of its members make it up-river to spawn. Consequently, individual First Nations are denied their rights to fish. As noted by Fred Fortier, Chair of the Secwepemc Fisheries Commission:

"DFO has continuously repressed sockeye escapements to the Thompson system (particularly early summer) through over fishing in the marine area over the past half century. These stocks need to be rebuilt to ensure our communities are able to meet their fishing requirements."

Lastly, many First Nations believe that the idea of a constitutionally protected priority right to fisheries means that aboriginal people should have greater control over their fisheries.

At the Chilliwack hearing, members of Sto:lo First Nations made strong representations in this regard. The Sto:lo Nation Fisheries Management Board and the Sto:lo Nation Fisheries and Aquatic Resources Treaty Working Group also followed up with a detailed written submission including how this majority control should be addressed to satisfy First Nation needs:

"All First Nations that can prove an historic dependency on Fraser River stocks should be collectively allocated a majority of the harvest of Fraser River bound salmon. For clarity, this majority allocation is calculated on the harvestable surplus for each species and stock on the Fraser. Fraser River First Nations would negotiate amongst themselves with regard to each Nation's share of each stock (e.g., through the Fraser River Aboriginal Fisheries Secretariat or similar body). DFO must recognize the inherent capacity and rights of First Nations to govern themselves with respect to reaching salmon sharing agreements within this majority allocation. Community size and the rate of growth of individual communities could provide a basis to calculate and regularly update the allocations of Fraser River stocks amongst Fraser River First Nations."

ECONOMIC ACCESS

Most First Nations do not derive sufficient economic benefits from fisheries and none at all in some cases.

In recent years there has been some acknowledgement of this by the Department of Fisheries and Oceans. Pilot Sales Agreements and ESSR (Excess to Salmon to Spawning Requirement) allocations have been made to various First Nations allowing for the capture and sale of certain fish stocks. However, these actions have been limited to a very small number of aboriginal communities and, in the case of ESSR fisheries, they have been quite sporadic. In addition some small-scale commercial licence transfers have occurred to coastal First Nations under the AFS Allocation Transfer Program.

The lack of economic access to fisheries is an obvious source of frustration for most if not all First Nations. Many First Nations recounted a litany of losses in this area. Coastal First Nation communities that once had many of their members directly involved in commercial fishing enterprises no longer do so as a result of licence limitation and reduction programs such as the Mifflin and Davis Plans. Many Interior communities also lost economic access to fisheries resources in the early days of the commercial fishery. In some cases, this served to turn once vibrant and self-sustaining communities into dependent ones.

The sense of frustration is fuelled by feelings that federal and provincial governments are not paying attention to the longstanding economic interests that First Nations had in fisheries. For example, Richard Watts of the Tseshaht First Nation noted that Nuu-chah-nulth people on Vancouver Island traded fish with Interior tribes.

Robert Dennis, chief councilor of the Huu-ay-aht First Nation, a nearby neighbour of the Tseshaht, notes that historically members of his First Nation fished over a wide area. He told the Panel that his head chief often pointed out that their traditional fishing area extended from the river far out to sea. Yet today, the Department of Fisheries and Oceans takes the view that traditional fisheries are somehow limited to small, site-specific areas.

On the coast the loss of economic access is often tied to restrictions through commercial licencing and quotas as described in a later section.

For Interior First Nations, a lack of economic access to fisheries resources is keenly felt. In many cases, Interior communities are situated near where economically prized salmon stocks spawn. Yet most of the returning fish are caught well before they enter often lengthy river systems, let alone before they move hundreds of miles upstream to the spawning beds. As Pat Matthew, of the Secwepemc Fisheries Commission, said:

"The bottom line for us in our country; we represent a huge portion of the production of salmon species, all of these processes are fine, but the proof is what shows up in our back yards in terms of fish and availability."

For Matthew and others, any discussion of economic access must be framed in terms of a fundamental shift in thinking about how fisheries resources are managed. If fisheries are managed near where the fish spawn, in terminal fisheries, more fish will be available for local First Nations and they can be managed with greater assurance that specific stocks will be conserved.

As Chief Fred Sampson of the Siska Indian Band said:

"We support the concept of terminal fisheries, to us it's not rocket science: why harvest stocks that are going to specific spawning sites out in the ocean when they can't identify these stocks? We certainly believe that a fair portion of the commercial fishery should be happening terminally in river."

The idea of a return to more terminal fisheries is one that First Nations both on the Coast and in the Interior understand. Both regions are replete with examples of the historic use of terminal fisheries by numerous First Nations, from weirs set up at the mouths of rivers on Haida Gwaii or the Central Coast to those on large Interior lakes such as Lake Babine.

As we will discuss shortly, very few First Nation communities have had the right recently to catch and sell fisheries resources through such programs as the Pilot Sales program instituted by DFO in the early 1990s under the Aboriginal Fisheries Strategy. The few that did, participated only after existing commercial licenses were voluntarily surrendered by their holders and paid for at taxpayers' expense.

In its written submissions to the Panel the Sto:lo, who were among the few First Nations to have benefited from the Pilot Sales program, said that fairer and more appropriate fisheries allocations for First Nations' economic needs are essential. If the Sto:lo believe this to be true, the frustration of the vast majority of First Nations who were never granted Pilot Sales and never enjoyed the benefits that flowed from the legal sale of limited catches of salmon is obvious.

"Current allocations for Fraser River Aboriginal fisheries are too little and First Nation fisheries do not receive the required priority in DFO policy and operational management," the Sto:lo Nation Fisheries Management Board and the Sto:lo Nation Fisheries and Aquatic Resources Treaty Working Group observed. *"The right to trade fish in exchange for other economic benefits … must be translated into a right to sell. However, we wish to stress the need to be mindful of ensuring that any sales for-profit must be carefully conceived prior to implementation. The right of individuals to benefit from commercial sale of salmon must be considered to be nested within Sto:lo's communal rights."*

Many First Nations believe that there is a looming crisis with regard to aboriginal access to fisheries resources for economic purposes, largely because the resource is increasingly privatized. This is leading to a situation where the costs to settle treaties continues to rise – any realigning of allocation requiring a buyback of licences or other compensation which is payable out of the First Nation's treaty settlement "envelope".

Another significant area of concern resides with First Nations that have won hard-fought legal victories that established their rights of economic access to fisheries resources. A case in point is the Heiltsuk Nation on the Central Coast. The Supreme Court of Canada has declared that the Heiltsuk have the aboriginal right to sell herring spawn on kelp or HSOK. Yet seven years after that right was affirmed in the *Gladstone* case, the Heiltsuk people continue to take a back seat to other commercial interests. This was described in the Heiltsuk written presentation to the Panel:

"In order to give proper expression to the Heiltsuk aboriginal right to harvest and sell HSOK allocation on the Central Coast must be increased and the herring sac-roe allocation must be decreased … an increase in the HSOK harvest to the Heiltsuk is legally and scientifically defensible, does not compromise the priority for conservation of stocks, and is not damaging to herring populations. The HSOK fishery is non-destructive, returning adults who have spawned back to wild populations, but is only 5–12 per cent of the total allocation. This is in contrast with the sac-roe fishery which takes 75–80 per cent of the total allocation and requires the sacrifice of all captured adults to obtain roe product."

As we will see, the frustration resulting from a lack of economic access is amplified by current economic conditions in the industry. As Basil Ambers noted in Fort Rupert: *"I have nephews in Alert Bay who can only get out two to three times a year. It is hard to compete, hard to even survive under conditions like that."* His estimate is that those same nephews in Alert Bay would have to purchase at least three licences to fish year-round. And the cost would be upwards of $120,000. That's too steep a price to pay for access to a resource that First Nations once had unquestioned rights to.

GOVERNMENT POLICIES AND PROGRAMS

Government policies have not adequately involved aboriginal people in fisheries management and have had mixed results. People who appeared before the Panel or made written submissions, expressed concern about a broad range of government policies and programs that they say threaten the well-being of fisheries and aboriginal interests to fisheries resources.

Concerns were expressed about a broad range of issues including:

- the Aboriginal Fisheries Strategy,
- conservation issues,
- aquaculture, and
- economic access, recreational fisheries and licencing.

Dan Smith of the Hamatla Treaty Society talked about the unrealized promises of AFS in management and access to fish for commercial purpose:

"The Aboriginal Fisheries Strategy was intended to be a platform from which First Nations could become involved in the industry and management. In many respects this program did not accomplish either … The commercial components were generally small and until recently did not allow economic development as regular licences did. Profits from commercial fisheries were taken off contributions (for management). Management responsibilities were restricted to rudimentary stock assessment and enforcement of Native fishers."

Beyond unhappiness with the limited economic access this program provided to some aboriginal people, there is a general and ongoing unease with the manner in which fisheries are being managed. First, there is concern about the lack of reliable data on stock inventories. Second, there is ongoing worry about the impact mixed stock fisheries continue to have on weak stocks. Third, there is concern that there is a shifting priority within DFO, a shift that favors fish farming operations over the perpetuation of wild stocks.

Proper inventory work is essential, the Panel was told, if First Nations are to enjoy access to fisheries resources that they are entitled to by law. As Yvonne Lattie, House of Gwininitxw, Gitxsan observed at Smithers:

"Before DFO allows coastal fishermen to proceed, we need to start taking stock. Inventory all tributaries to the Skeena and Nass rivers so that we know what kind of baseline we have – what type of inventory we have that has to be shared among the people."

For Lattie and others, there is insufficient attention paid to the conservation of stocks. And conservation is critical if First Nations and others are to enjoy access to fisheries in the years ahead. The focus should be first on the fish, not the fishery. If things like a wild salmon

strategy or *Species at Risk Act* can help make that happen, all the better.

Many people who appeared before the Panel believe a fundamental shift in fisheries management must occur. That shift involves moving management of commercial catches from open-water mixed-stock fisheries, to more selective fishing technologies near where fish stocks spawn. This ensures that specific fish stocks survive and/or recover in number. And will ensure that First Nations' rights to access and manage those fish are respected. As it now stands, DFO-sanctioned interception of returning fish stocks means that many First Nations are denied fishing rights. As Fred Fortier observed:

"Mixed stock marine fisheries are causing many of the weak or small stocks to decline due to overharvesting. The Secwepemc's usual and accustomed fishing sites and fishing practices are largely based on the geographic distribution of our communities; the Secwepemc depend on the small stocks (streams) to maintain these fisheries and the related fishing practices which are integral to our culture."

Richard Watts described a similar problem on the coast with fish returning to the Somass River near Port Alberni.

"About migrating stocks, we live at the end of a migrating route. Eighty per cent of our stock is caught before it returns. We're not so concerned about the Fraser, but in my community we rely totally on the Somass stock."

One submission even called for a complete reduction in mixed stock ocean fisheries that deplete weaker stocks.

"By-catch of co-migrating weak stocks must be eliminated. The problem of coincident harvest of spawners from weak stocks has remained a significant problem for some time. Whether we are speaking of Thompson River coho, Cultus Lake sockeye, early Stuart Lake sockeye, or Thompson River steelhead, the fact that such populations co-migrate with strong stocks (e.g., Adams River sockeye, Chilko Lake sockeye, Quesnel River sockeye) will continue to leave them vulnerable to extinction so long as non-selective fishing methods are used – particularly non-selective on-ocean methods," notes the Sto:lo Nation Fisheries Management Board and the Sto:lo Nation Fisheries and Aquatic Resources Treaty Working Group.

Salmon aquaculture was another area of concern. As Gerald Wesley, Chief Negotiator of the Tsimshian Tribal Council warned:

"There's a trend emerging that they [salmon] don't have to be wild. It looks like the two levels of government are prepared to gear up a farm fish industry. Farm fish are going up; wild stocks are going down. We can't afford to trade off. There is a lack of attention to enhancing the wild stocks."

Finally, some First Nations were disturbed by the lack of resources for restoration of wild salmon while other economic activities such as fish farming were booming and oil and gas development was being promoted. This is an area of rising concern, particularly for First Nations who have been working to try to restore salmon runs to their former abundance. This work commonly involves operating fish hatcheries and rehabilitating streamside lands damaged by logging activities; both endeavors being time consuming and expensive. Why pay for that work if it can be undone by other activities endorsed by the Department? As Martin Weinstein, aquatic resources coordinator, for the 'Namgis First Nation, remarked:

"…many of our members see the intensive development of salmon farming in our area and the encroaching shadow of offshore oil and gas as signs of further declines in government commitment to the health of local salmon and the people-of-the-salmon."

Another major area of concern for First Nations, particularly those in the interior, was only gaining access to salmon if "surpluses" found their way to the spawning grounds. The Carrier Sekani Tribal Council noted in its presentation to the Panel that since its trade system was outlawed in the early 1900s, commercial access to Fraser River fisheries resources has been extremely limited. One area of potential opportunity would be to manage fisheries resources in such a way that an "excess" of spawning salmon made it up the Fraser River and its tributaries so that Interior First Nations could catch and sell fish. But this is not something the Department seems particularly interested in doing. As the CSTC noted:

"[These] opportunities have not been afforded to any upper Fraser First Nation. This is in part due to the absence of mechanisms to accurately determine stock escapement prior to their arrival in terminal spawning areas…There is tremendous pressure on DFO to manage fisheries in such a manner so as to avoid 'surplus' escapements, and thus accrue all available benefits to the commercial sector."

Other interior First Nations including the Wet'suwet'en say there is much to suggest that there are good opportunities for a wide range of fisheries based on returns that are in excess to spawning requirements. (Spawners above that number are considered "surplus"). But problems in getting DFO to grant permission to catch those fish remain. The Wet'suwet'en believe the problems in this regard are partly a result of gathering the data necessary to prove that a river system has excess escapement. But more deeply it's a problem of politics and a lack of will to think and work creatively with First Nations.

"The second problem appears to be that DFO has no system in place to approve new ESSR opportunities. DFO has suggested that the best way to get opportunities for commercial fisheries is through treaties. This suggests that the problem of new ESSR opportunities is mainly a political issue, not a technical issue. The Wet'suwet'en would like ESSR fisheries for Chinook, Coho, Sockeye, and Pink salmon," said Walter Joseph, fisheries manager for the Office of the Wet'suwet'en. *"The coho runs have increased dramatically since the Wet'suwet'en and DFO implemented plans to conserve coho. Coho is now the largest salmon species run in Wet'suwet'en territory."*

In closing, there is general frustration at the lack of input that First Nations have in critically important fisheries management decisions. Generally speaking, First Nations should be playing a stronger management role because they live in communities that are close to where fisheries resources are found and they know those resources intimately.

LICENSING AND QUOTA SYSTEMS

Canadian fisheries licencing and quota systems have had adverse effects on the ability of First Nations to make a living from the fishery.

On the Coast in particular, First Nation peoples have struggled to stay in the commercial fishery. Various programs aimed at maintaining First Nation access to fisheries have had limited success, partly because they were put in place before acknowledgement of the need for treaties. As James Wilson told the Panel in Fort Rupert:

"When DFO licencing came in there was no recognition of aboriginal rights and title. [It was] not even on the horizon…[There's been] lots of changes since the licence system came in, but there's not changes to recognize our legal standing."

John Henderson described the impact of licencing programs at the community level. While his experience centres on events in Alert Bay, it could just as easily apply to any number of First Nation communities elsewhere in the province.

"We've been pushed out of an industry that we've been born and bred in," Henderson said. *"Alert Bay has … gone from 90 per cent to 10 per cent involvement in the commercial fishery."*

There has been a tremendous social cost associated with these changes. As described by Cliff Atleo of the Ahousaht First Nation, the community once had self-sustaining families that engaged in all manner of fisheries including groundfish, chum and other salmon species, herring and halibut. When not fishing, families augmented incomes through trapping and other enterprises. Much of that was lost with the early licencing programs and later through various licence buyback schemes.

Many First Nations to speak before the Panel also expressed fear that the DFO is further alienating resources from aboriginal people.

Consistent with that, the Nuu-chah-nulth Tribal Council's Shawn Atleo said:

"Canada and BC must suspend their privatization policies in the natural resources sectors until treaties have been settled, or until sufficient allocations have been set aside from the privatization process to settle fairly First Nations' interests … The cost of access to

these privatized resources has skyrocketed during the treaty process, enriching private investors, many not even fishermen."

Another area of emerging concern involves treaties and allocations of fisheries resources between First Nations. This is something that probably can only be addressed through changes in management structures, an issue discussed a little later in this section. For now, however, the general point is that the Federal and B.C. governments are not thinking about First Nations' needs in anything approaching an integrated fashion when issues of licencing or allocation are discussed during treaty talks and other negotiations with individual First Nations.

In closing, approaches to licencing and quotas for First Nations need to be changed. How this is accomplished is the big question.

RECREATIONAL FISHERIES AND TOURISM

Recreational fisheries and related tourism opportunities have grown significantly. These activities are often extremely lucrative for the businesses involved, generating significant expenditures and a high dollar return for each fish caught. Generally speaking, there are not a lot of economic benefits that flow to First Nations as a result of these fisheries. And there are conservation concerns associated with them too (everything from over-fishing of certain stocks, to survival of individual fish that are caught and then released in a weakened state back into the environment, to the threats posed to recreational fisheries by fish-farming operations).

Among the various concerns expressed by First Nations on the subject of recreational fisheries are the following.

For some First Nations such as the Wet'suwet'en there is a strong desire to share in a greater portion of the wealth generated by such activities. The main impediment to achieving this is that the Province has capped available "rod days" to guiding interests, thus denying First Nations the opportunity to prosper economically by taking high-paying visitors to prime fishing spots within their territories. Other First Nations suggested that new ways be explored to ensure that some economic benefits from the sport fishery accrue to aboriginal communities. One suggestion was to place a surtax on sport fishing licences that could then be turned over to First Nations to assist them in monitoring the sport fishery and protecting local stocks.

Other First Nations such as the Homalco, see a convergence between First Nation interests and sport fishermen since both derive benefit by keeping the region where paying customers travel in a pristine or undamaged state. By keeping coastal watersheds free from logging-related damages and developments such as fish farms, local wild fish stocks will remain healthy. This in turn will provide fish for recreational or sport fishers, including Homalco people.

For still others, there is a deep concern that the level of sport fishing activity has reached a saturation point that threatens the very existence of local environments and interferes with traditional activities. A case in point is Haida Gwaii (the Queen Charlotte Islands), where a large number of fishing lodges (some on floating platforms) are located.

"There are 19 [sport] fishing lodges on Haida Gwaii. We are trying to stop another lodge from coming to the island. Another lodge sunk last year and we are trying to prevent his return. As part of our management program, we're trying to get the lodges out of there," said Lawrence Jones, of the Council of Haida Nation. *"…We acknowledge that tourism will not stop, but we are trying to find a way to manage this."*

Finally, many people to speak before the Panel expressed deep frustration with the recreational fishery to the extent that like the commercial fishery its interests are served ahead of aboriginal interests.

John Henderson expressed the concerns of many First Nations in this regard. He noted that in the Hakai Pass the recreational fishery *"has taken over"* to the point that local First Nations *"barely have access to a native fishery."*

"We're harassed to the point where we have to get our nets out of the water … this has to be dealt with or somebody is going to get hurt," Henderson said. *"You've got recreational organizations that have a heck of a lot more dollars than anybody. They can get in doors we can't. They can close areas…They now have an allocation for sockeye. They've got something that First Nations have been looking for for a long time."*

Added Ryan Mathison of the Musqueam Fisheries Department:

"On more than one occasion Musqueam has held its members out of the water in order to preserve and restore Fraser River bound stocks. Musqueam would like to have the Department of Fisheries and Oceans (DFO) respect the rules they have put in place with regards to conservation. All too often the Musqueam people along with other First Nations have lost opportunity and their needs have not been met due to questionable concerns put forward by DFO. At the same time, the same 'conservation concerns' do not burden the sports/recreational industry."

HABITAT, ECOSYSTEMS AND LOCAL STEWARDSHIP

Almost all aboriginal communities have witnessed profound changes to many of their traditional lands and waters. The changes result from a host of factors including new fishing technologies, hydroelectric projects; agricultural developments; fish farms; urban sprawl; gravel extraction; industrial and municipal pollution; logging of steep slopes and riparian areas; and mining and energy developments.

Three thumbnail sketches offer some insight into the variety of habitat losses and their impacts on First Nations, involving the Namgis on northern Vancouver Island, the Huu-ay-aht on the west coast of Vancouver Island and the Okanagan.

On northern Vancouver Island, members of the Namgis First Nation have witnessed significant changes to the lands and waters of their traditional territory near Alert Bay.

The timber-rich Nimpkish Valley and the Nimpkish River were the source of great and sustaining wealth for the aboriginal people of the region. While there is no question that major river systems such as the Fraser, Skeena and Nass produce huge numbers of salmon and other fish species, smaller rivers like the Nimpkish once produced hundreds of thousands of sockeye and chum salmon along with tens of thousands of chinook and coho and healthy numbers of pink salmon and steelhead.

By the late 1970s that treasure house was a fraction of its former self due to depletion of local stocks in indiscriminate mixed stock commercial fisheries and a vastly altered forest ecosystem due to industrial logging. Since that time, the Namgis First Nation has been steadily trying to undue the mistakes of the past through hatchery production of salmon that are reintroduced into local waters and through habitat restoration work funded by Forest Renewal BC and Fisheries Renewal BC, both of which no longer exist.

In the meantime, members of the First Nation are left pretty much sitting on the sidelines hoping that more dollars will materialize to continue restoration and renewal projects. As for opportunities to participate in what fisheries and forestry opportunities that remain, the First Nation says its prospects are slim.

"Our local salmon stocks are depleted. Our forests were allocated to outsiders and are now depleted of the great timber wealth they once held. There are still some healthy fisheries within the Kwakwaka'wakw Sea (which the Department of Fisheries calls Statistical Areas 11 and 12), notably for prawns, crabs and the dive fisheries for urchins, sea cucumbers, and geoduck. None of our members … hold licenses to those fisheries," observed Martin Weinstein, the Namgis First Nation's aquatic resources coordinator.

The plight of the Namgis is shared by many First Nations. It points to the challenges that must be addressed in the coming years as aboriginal people throughout the province wrestle with their own site-specific restoration efforts and how, in the meantime, passing fish stocks are to be shared between Nations.

Like the Namgis, members of the Huu-ay-aht First Nation on Vancouver Island's West Coast, are also struggling mightily with habitat restoration and enhancement projects. The First Nation's focus has been on restoring salmon runs in the Sarita River which cuts through the heart of the Huu-ay-aht's traditional territory and was, for many years a valuable source of salmon for food, social and ceremonial purposes as well as commercial opportunities. The Huu-ay-aht believe that, for their ongoing efforts to rebuild a broken watershed and restore local salmon runs, a simple concept on future allocations should prevail.

"We want to reap the benefits of any stocks that we may replenish," says the Huu-ay-aht's chief councilor, Robert Dennis. By reaping the benefits, Dennis says the

Huu-ay-aht intend to claim a 50 per cent share of whatever comes back to spawn in their local waters. The other half can be shared between other interests, the commercial and recreational sectors included.

Finally, on the habitat and ecosystem front, there is a strongly held conviction among First Nations that there is a lack of will by the federal and provincial governments to adequately fund the costs associated with rebuilding wild stocks and forest ecosystems.

"Provincial and federal cutbacks are reducing the number of agency staff, especially relating to habitat, science and planning, and thus limiting the work activities of remaining staff. There is also a lack of federal and provincial funding programs to effectively plan and implement fish and habitat restoration projects," observed Pauline Terbasket, executive director of the Okanagan Nation Alliance.

The Okanagan region has some of the most endangered ecosystems in Canada. It is also part of the transboundary Columbia River system. The Columbia River and its tributaries constitute one of the most heavily dammed river systems in the world. The effect of numerous hydroelectric developments has been the complete elimination of many salmon runs. Only remnant salmon remain in parts of the Okanagan region. Hanging on to, let alone rebuilding those remnant stocks, poses huge challenges. In addition to dealing with the mistakes of the past, the Okanagan Nation Alliance must also contend with what it calls inadequate water use planning in the region, continued agricultural expansion and a growing urban population. If ever there was a need to fund restoration efforts it is here.

FISHERIES MANAGEMENT

One presenter gave a compelling reason why First Nations need to be more involved in fisheries management.

"The biggest obstacle that faces the Musqueam First Nation when dealing with Canada [is that] there is a legal duty on the Crown to engage in meaningful consultation with First Nations and accommodate First Nations Aboriginal interests. Musqueam has always been approached with plans/strategies that are 'top driven' whereby no real constructive consultation has taken place. Musqueam would like to be involved in all levels of planning, not just given an ultimatum with regards to fishing plans and opportunities."

Ryan Mathison, aboriginal fisheries coordinator, Musqueam Fisheries

But there is a general feeling that local stewardship is not a government priority, and governments do not recognize First Nations responsibility to manage and conserve salmon and other aquatic resources within their traditional territories.

Some people proposed establishing regional management boards, similar to a project that has been undertaken on the West Coast of Vancouver Island between members of various Nuu-chah-nulth nations and other parties. However, as members of the Nuu-chah-nulth told the Panel, such a board can only be effective if it is properly funded and if it has real powers to make decisions on management and allocation of "money stocks" such as salmon.

One Nuu-chah-nulth leader, Dididaht chief councilor Jack Thompson, said:

"Management of the West Coast Fishery must be by a Management Board which has the sole responsibility to recommend to the Minister(s) on all aspects of fish and fishery management, including, but not limited to research, planning, conservation, stewardship, fish production including aquaculture, and stock rehabilitation, and on matters of annual harvest distributions. The Management Board should be comprised of representation by the First Nations, the commercial fishery, the sport fishery, the aquaculture industry, the Government of Canada, and the Government of British Columbia."

Managing in true partnership is what many First Nations believe is required in order to ensure conservation, adequate fisheries resources for aboriginal people, and an equitable sharing of those resources once the interests of conservation and aboriginal needs have been addressed.

"Shared decision making and co-management control is critical and overdue. There needs to be comprehensive and equal First Nations representation on all relevant fisheries management boards and committees having a direct impact on the manage-

ment and allocation of Pacific salmonids – including decisions regarding conservation. This comment applies to all levels in the decision-making hierarchy from the Pacific Salmon Commission through to the Fraser River Panel. Only an equal level of decision making authority and management responsibility between First Nations and the Department of Fisheries and Oceans will sufficiently address this issue," noted the Sto:lo Nation Fisheries Management Board and the Sto:lo Nation Fisheries and Aquatic Resources Treaty Working Group.

One point frequently made is that there are already indications that focusing management efforts at a more local level pays dividends. It results in more accurate data collection. And it does so at a reduced cost, in that to get the same information on a site-specific basis would require federal or provincial officials to either send staff into the field to collect and then analyze the information or to contract that work out.

Walter Joseph, fisheries manager for the Office of the Wet'suwet'en, noted that *"no one goes out into the field anymore"* with the result that the Department of Fisheries and Oceans increasingly relies on Wet'suwet'en people to provide data. *"We gather such good data on our runs that DFO depends heavily on our numbers so we are generally heavily involved in fishery management issues…. Last year was the first year that DFO have made an effort to include us in the integrated fisheries management plans. Up until then they'd tell us what they were going to do and that was it. Last year they really made an effort to make sure our views were considered."*

Such outcomes are no surprise to people such as Harvey Alphonse of the Cowichan Tribes and reinforce his view that a fundamental shift in fisheries management is required, one in which First Nations are directly involved in managing local stocks.

"Our home is here on the ocean and beside the rivers. We live near the spawning beds, we see the fish from birth and welcome them home when they return … We have the presence and understanding to provide continuity in monitoring, rehabilitation, and restoration," Alphonse said. *"Fisheries and Oceans Canada, with its decades of budget cutbacks and lack of future prospects, is unable to make this depth of commitment and dedication to the sea and its creatures."*

A focus on meaningful shared decision making would also serve to bring together two powerful and complementary forces – the Traditional Ecological Knowledge or TEK of First Nations and various scientific disciplines. As it stands, TEK is not feeding into management decisions to near the degree it should, the Panel was told.

Clearly, there is a need for First Nations to work cooperatively in sharing fisheries resources however they end up being managed. The topic of sharing was much on the mind of various people to appear before the Panel. Walter Joseph noted that it is important for First Nations to remember that common fish stocks pass through many First Nation territories, therefor there is a need to cooperate with one another. In a written submission to the Panel Joseph said:

"How should fish stocks be shared? When food fish are concerned it is important to remember that common fish stocks pass through many First Nation territories. First Nations should allow other First Nations to access the stock within their territory. First Nations should provide authorization in writing for control and enforcement [to] prevent interference in traditional fisheries, control over the numbers and species caught, control over who fishes when and where, and control over fishing methods. When commercial fisheries are concerned, it is important to ensure that food fish needs are met prior to a commercial fishery. Terminal fisheries should have priority. Always consider the size of the run when allocating. A First Nation territory where a stock spawns should have priority consideration, particularly when the runs are small. Large runs are best allocated through discussions by each First Nation involved."

Finally, there is a need for incentives to ensure that First Nation-to-First Nation negotiations on fisheries management and allocation take place. In recognition of the constitutionally protected rights of aboriginal people to fisheries resources, the federal government should provide the funds necessary to ensure these negotiations take place and that an equitable sharing of fisheries resources (after conservation) is achieved. As Ko'waintco Michel, chairperson of the Nicola Tribal Council, observed:

"First Nations need a Tier 1 (First Nation participation only) process that does not involve DFO or their funding. Canada must provide neutral funding through the Department of Indian and Northern Affairs (DIAND) that would be specifically earmarked to support the establishment of a Tier 1 fisheries process, e.g. using the inter-tribal fisheries treaty or a new draft of a memorandum of understanding. For successful establishment of a Tier 1 fisheries management process, Canada must commit to provide ongoing funding to support it for as long as it is viable. Each First Nation must put this issue at the top of their priority list and commit the political and technical resources necessary to achieving the agreement, even if it takes two or three years."

In the following section of the report, the Panel will address various management and allocation models that could serve to increase First Nation involvement in fisheries management and allocation decisions. But before addressing that, we briefly turn to some of the main points on treaty issues addressed during the Panel's public hearing process.

TREATY ISSUES

The treaty process falls short of many First Nations' expectations for the fishery and may affect the interests of those First Nations that have chosen not to participate in treaties.

It is not the purpose of this report to offer suggestions on how fisheries issues should be addressed in present or future treaty negotiations, nor to comment on the existing rights of access to fisheries resources as set out in the few treaties that have been signed or Agreements-in-Principle that have been reached.

However, it is important to point out that during its public hearings and in the written submissions received, the Panel heard numerous concerns about how the signing of treaties may affect relations between treaty and non-treaty Nations as well as other concerns about the treaty process.

In summary form they are as follows:

- Fisheries settlements in treaties have the potential to prejudice the fisheries of those who are not in treaty negotiations and some mechanisms need to be developed to address this.
- The treaty process has been much slower than anticipated and there is a need for immediate steps to improve access to fisheries both inside and outside the treaty process. The reason for this is that aboriginal rights and title is not just a treaty issue so fisheries access needs to be addressed across the board.
- In the absence of meaningful progress in treaty negotiations, some First Nations are embarking on alternatives such as litigation and direct action.
- A seemingly endless change of mandate on the part of federal and provincial treaty negotiators. One presenter said the mandate on fisheries had changed no less than three times since 1995 at one treaty table.
- A lack of political will to make substantive changes to fisheries allocation and management during treaty talks.
- Caps on the amount of funding available through treaties to assist First Nations in staking a greater claim to fisheries resources – the end result being limited allocation of some fisheries resources, and no allocation of others.
- A reluctance to recognize in treaty the rights of First Nations to earn a living from aquatic resources, and
- An insistence by the federal government that limits be placed on allocations of fisheries resources for food, social and ceremonial purposes – limits that fail to account for First Nations' economic needs and their growing populations.

Notwithstanding these concerns, the Panel notes that some First Nations in the treaty process are negotiating actively and with some success to resolve these issues through the treaty negotiation process.

4 *Our Vision for B.C. Fisheries*

THIS SECTION DESCRIBES OUR VISION OF FISHERIES MANAGEMENT and identifies principles to guide achievement of that vision. In addition, we describe a framework for fisheries management that we believe addresses predictability for resource users in terms of access and use, focuses on conservation and sustainability of the resource, and considers how to create new economic opportunities. Finally, we describe what we believe is necessary to achieve some degree of equity in the fishery for First Nations and certainty for aboriginal and non-aboriginal fishers. Implementation of this vision will require leadership on the part of all governments, First Nation, Federal and Provincial. If implemented, however, the Panel believes it will provide much desired certainty both in the interim and in the long term.

The Panel believes that most First Nations and other Canadians share a common vision of where they want fisheries management to be. Too often, however, we argue about what is immediately in front of us. Restricting ourselves to the way things are done now prevents us from looking forward. Trends in modern fisheries are not encouraging and we need new approaches to manage and allocate fisheries resources.

4.1 Vision

We believe that the following seven goals highlight what the vast majority of First Nations in B.C. desire when it comes to healthy fisheries and their use by aboriginal and non-aboriginal people.

- That we have healthy ecosystems that are resilient to change.
- That within the limits of healthy ecosystems and species, First Nations have the ability to use species and habitat to nourish their people for food, social, spiritual, educational and ceremonial purposes.
- That within the limits of healthy ecosystems and species (and once the second goal is achieved), that First Nations have the ability to generate enough economic wealth from a diversity of resources and uses so that families and communities are healthy.
- That within the limits of healthy ecosystems and species (and again, once the second goal is achieved), that First Nations have the ability to share their resources and wealth with respectful neighbours and guests, and that this sharing is reciprocated.
- That First Nations, Federal, and Provincial governments jointly manage aquatic species and ecosystems, and that those involved in the use and enjoyment of aquatic species and ecosystems have the responsibility and ability to meaningfully contribute and share their knowledge, experience, and energy towards achieving the above goals.
- That First Nations, Federal, and Provincial governments, with the help of others, ensure aquatic species and ecosystem users and managers are held accountable if they are not respectful of the above goals.

- That there is a high degree of certainty that we can continue to achieve these goals over time.

Healthy ecosystems and species are the foundation of human health and wealth, the wellspring upon which all else rests. If we do not respect these needs, we threaten our security and survival. Therefore, our ability to achieve our visions is connected with our responsibility towards other species and broader ecosystems.

Geographically and culturally diverse communities are also critical to our security and survival. They provide a variety of experiences, perspectives, roles, and benefits that contribute to a more resilient and vibrant society and economy.

In the next section we discuss management and allocation principles by which to achieve our vision.

4.2 Guiding Principles for Management and Allocation

The following management and allocation principles are a guide for all those involved in management of aquatic species and their ecosystems whether First Nations, Federal, Provincial, and local governments, and all others who enjoy and use aquatic resources.

MANAGEMENT PRINCIPLES

Ecosystem Approach

Species and their habitat are managed through an ecosystem approach. An ecosystem approach looks at the role that a species, habitat-type, or activity plays in relation to other species, habitats or activities, and in relation to their broader ecosystem. It also looks at the cumulative effects of different activities. Finally, it includes understanding broader processes and dynamics driving change at smaller scales.

Conservation

The protection, maintenance, and rehabilitation of aquatic resources, their habitats, and interconnected life support systems, take precedence in managing aquatic resources. For species and ecosystems to continue to produce benefits, we must protect their diversity and resilience to impacts and changes.

In making decisions, it is important to respect the limits of our knowledge and understanding of aquatic systems, especially given current uncertainty about environmental change. Resource managers and users should therefore err on the side of caution when making decisions. According to this precautionary principle, where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent harm to aquatic species and their habitat.

Sustainability

Aquatic resource use should be conducted in an environmentally, socially, and economically sustainable manner. Asking whether an activity can continue to produce similar benefits for future generations is one way of determining whether an activity is sustainable. This test should be applied in the context of prior knowledge, our limited ability to predict the future, and an ecosystem approach that looks at the activity in relation to other activities or broader dynamics.

Full-cost accounting that integrates social, ecological, and economic costs and benefits should also be used when making decisions related to aquatic resources.

Shared Responsibility

First Nations, Federal, and Provincial governments should take primary responsibility for the management of aquatic species and habitat. A central First Nations role in management is necessary due to the existence in B.C. of aboriginal title and rights. Local governments currently have delegated authority from the provinces over certain issues, and play an important role in the management of aquatic species and habitat. Fishers, communities and the public at large should have opportunities to contribute meaningfully to management.

Accountability

Aquatic resource managers and users should be accountable for the results of their decisions and actions. Accountability involves establishing desired outcomes, establishing rules of conduct in achieving outcomes, monitoring rules, evaluating whether outcomes are being achieved, and implementing meaningful corrective action.

Diverse Benefits and Approaches

Diversified benefits and participation in management are important in garnering support for protecting aquatic species and ecosystems.

Within the framework of a common vision and principles, different approaches and institutions should be nurtured in different geographic or sectoral communities in B.C.

Diverse approaches should be independently and transparently evaluated according to a common framework. This can provide incentives for innovation and the ability to test and adapt management strategies.

ALLOCATION PRINCIPLES

- Ownership of aquatic species and their habitat should be held in trust by governments on behalf of the people, and not conferred irrevocably to private parties.
- The use of aquatic species and their habitat should carry with it the responsibility to treat them with respect and ensure their continued and unimpaired use and enjoyment by future generations.
- Allocations or withdrawals of allocation should occur through independent, fair and transparent processes with clear goals, criteria, rules, and sanctions.
- There should be incentives and mechanisms through which different parties can develop sharing arrangements. Where sharing arrangements cannot be developed, no uses should occur or an independent third party should arbitrate using the goals discussed below as general criteria.
- In developing and implementing an allocation framework and strategy, First Nations, Federal, Provincial, and local governments, with the aid of those who enjoy and use aquatic resources, should work towards the following objectives, ranked in order of priority:
  - To maintain the diversity and productive capacity of aquatic species, habitats and ecosystems.
  - To meet First Nations' constitutionally protected Aboriginal and treaty requirements.
  - To meet the recreational or commercial needs, especially rural communities adjacent to aquatic species and their habitat.

4.3 Management and Allocation Framework

New institutions are required that have delegated authority, clear roles and responsibilities, and stable sources of funding.

New institutions could include area-based bodies that provide a strong and clear framework for integrating First Nations, Federal, Provincial, and local government jurisdictions and authority.

An umbrella body or bodies that address broader jurisdictions – coast-wide or regionally for example – should also be considered. The objective of such bodies is to coordinate the efforts of area-based bodies.

Because the existing fisheries science regime is closely aligned to DFO and the commercial fishing industry, its impartiality is suspect amongst First Nations and other stakeholders. Thus an independent science institution is needed that operates at regional and coast-wide levels, and that looks both at individual species and ecosystems.

An independent, arms-length allocation and arbitration body is needed that works with area-based, regional and coast-wide forums. For example, issues not agreed to locally need to be resolved. Such issues would be the responsibility of the arms-length body.

4.4 Equity and Certainty in the Fishery

As described in the Section 3, many submissions focused on the need for greater economic access and a greater role for First Nations in management and decision making. The legal foundation for these interests was described in Section 2.1. An ongoing uncertainty with fisheries in B.C. is the amount of fish that First Nations may receive either through the treaty process, implementation of existing treaties (such as the Douglas Treaties) or court decisions. A recent assessment identifies aboriginal land claims processes and their uncertainty as major "threats" affecting the competitiveness and viability of the B.C. seafood sector, the tidal water recreational fishery, fish catching, seafood processing and aquaculture.
It also says that aboriginal land claims can present an

"opportunity" for the commercial fishing sector and others. Licence policy, allocation and security of resource access were the main uncertainties for B.C. capture and recreational fisheries. Land tenure was the main uncertainty for aquaculture and tourism businesses. *(See the reference section for a citation of the report prepared by G.S. Gislason & Associates for the B.C. Ministry of Agriculture, Food and Fisheries.)*

While some progress in fisheries reallocation is being made through the B.C. treaty process, the pace to date has been slow. The Nisga'a Treaty, which was done outside the current treaty process, and Agreements-in-Principle reached by others within the B.C. treaty process, show that negotiated solutions are possible in B.C. But the treaty process is unlikely to result in the simultaneous resolution of issues across B.C. and will, instead, be protracted and piecemeal. Due to frustration with the slow pace of negotiations, some First Nations are already pursuing court solutions. Alternatives are to wait for the treaty process or court processes to unfold or to take steps now to develop political solutions. Two case studies examined in Section 2.5 show how certainty was provided for indigenous and non-indigenous people in other jurisdictions: one by means of a court decision and the other through a political process.

The *Boldt* decision gave certainty about how fish would be shared in Washington State. There the tribes subsequently developed management systems to accommodate that decision. Court supervision or adjudication was an important part of that process. The tribes organized themselves to work with federal and state governments and a key role was defined for the tribes in local, regional and international fisheries management processes.

In New Zealand, the government was contemplating a major change in the management of the country's fisheries by switching to a transferable property regime known as a Quota Management System. Spurred in part by the threat of Maori court action, the government made a political decision with regard to Maori participation in the fishery. The resulting settlement was negotiated over a period of several years and provided certainty for the Maori and the fishing industry. The process of deciding how assets would be shared by the Maori was a difficult issue that is still not completely resolved.

One may argue that the B.C. situation differs from both Washington State and New Zealand. But the main lesson to be learned is that certainty in the fishery can occur in several ways after which all parties affected by the decision can work within the changed system. To a certain extent, the Canadian and B.C. governments decided some time ago to pursue a political solution on future fisheries management and allocation issues through the B.C. treaty process. This involved negotiations with individual First Nations. But the process has proven to be far slower than anticipated. The lack of progress in treaty negotiations, and the reluctance of governments to deal forthrightly with fisheries issues through interim measures agreements or other processes, is a clear source of frustration for many First Nations.

We strongly recommend that the fisheries issue be fast-tracked both inside and outside the treaty process. This would be done as an interim measure while more long-lasting arrangements are negotiated. We recommend that half of all the fisheries resources in B.C. are allocated to First Nations. This would provide governments with the currency to make necessary changes and provide the much-needed incentive for First Nations to negotiate rather than litigate. It should be recognized that allocation targets may have to be higher than half in some fisheries particularly those where existing First Nation participation is already high.

Our recommendation for a 50 per cent share as an interim step is an attempt to reconcile aboriginal and crown title. As aboriginal title is the underlying title, then putting it on a more equal footing in the interim is justified.

5. *Management & Allocation Options*

THIS SECTION LOOKS AT A VARIETY OF OPTIONS FOR MANAGING and allocating fisheries resources based on the vision outlined in the previous section. Many of B.C.'s fisheries, at least those of significant value, have already gone through typical stages where everyone can fish (open access), followed by limits on the number of fishers in combination with vessel and gear limitations. Each of the management and allocation options discussed below was presented in some form during our hearings, and we consider the potential of each. Finally, we examine how our vision for B.C. fisheries might apply to two existing fisheries: the salmon fishery in which commercial fisheries are managed through limited entry, and the halibut fishery in which the commercial fishery is managed through individual vessel quotas. With the salmon fishery we also consider opportunities for upriver fisheries and how they could be implemented.

It helps to have a common understanding of what fisheries management is. James McGoodwin in *Crisis in the World's Fisheries: People, Problems, and Policies* describes fisheries management as solving two fundamental problems: conservation and allocation. Conservation involves deciding how much fish can be caught on a sustainable basis. Allocation involves deciding who will benefit, in what ways and to what extent. McGoodwin lists seven basic strategies that commonly try to satisfy both concerns. They are:

- closing areas,
- closed seasons,
- restricting gear and technology,
- establishing aggregate quotas on total allowable catch (TACs),
- attempting to stimulate fisheries growth or to control fishing effort through monetary measures such as subsidies and taxes,
- limiting entry, and
- instituting various forms of private property rights.

McGoodwin describes the first five in the list as common property strategies in open-access fisheries, where everyone can fish. The last two strategies restrict who can fish. Limited entry is already applied in most Canadian fisheries. Many B.C. fisheries have already instituted individual vessel quotas (IVQs) by which a share of the total catch is allocated to individual fishermen as a type of private property right.

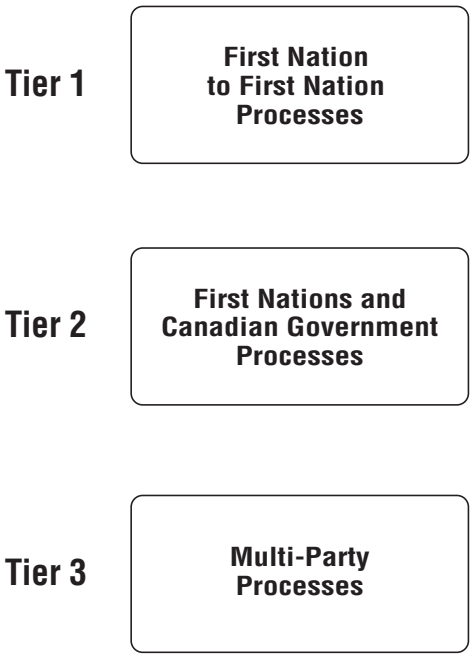
In the next section we describe a variety of management and allocation approaches. The management section focuses on ways by which First Nations can be involved in fisheries decision-making. Here we give some examples of existing processes and describe a framework that already exists in B.C. and how it might be improved. The allocation section considers several approaches to allocation and discusses various situations where they might be used.

5.1 Management Options

This section discusses the current management approach in B.C. fisheries, and options for improved decision-making with a focus on how First Nations can be more fully integrated and engaged in fisheries management. Managing the Pacific salmon fishery is a complex task given the multitude of interests from commercial and recreational to aboriginal. Different approaches to integrated fisheries management are evolving within different regions in B.C.

Section 2.1 described the relationship between First Nations and Canada and the need to reconcile First Nation and Canadian interests in the fishery. At a minimum this requires bi-lateral consultation between First Nations and Canada. In the case of migratory fish where one First Nation's interest in fish can overlap with another, it is advantageous for First Nations to be able to discuss sharing or management issues among themselves. Furthermore, in the case of shared fish stocks, a multi-sector process involving third parties is often necessary.

FIGURE 27 Three Tiered Process for Dialogue with First Nations



This has been called a three tier process as illustrated in Figure 27. In this context, each "tier" refers to one of three levels of discussion amongst the different fishing sectors: First Nations, the governments and third parties. For our purposes Tier 1 involves discussions and organizational relationships amongst First Nations; Tier 2 refers to First Nations and the Canadian government; and Tier 3 refers to First Nations, governments and third parties. Existing management and advisory structures and processes are not well integrated but seek to involve the different sectors: sport, commercial, and First Nations. These structures can range from local, to regional, to province-wide in scope.

Most First Nation management and advisory structures operate on a local basis. Several regional structures exist such as the Skeena Fisheries Commission and the Fraser Watershed Aboriginal Fisheries Secretariat. At the provincial level several organizations represent First Nations interests, including the B.C. First Nations Summit, the B.C. Aboriginal Fisheries Commission and the Native Brotherhood of B.C. The current process involving Canada and the other sectors is discussed in the 'status quo' section below.

5.1.1 Status Quo

PACIFIC SALMON ADVISORY STRUCTURE

The Department of Fisheries and Oceans (DFO) is developing an advisory structure for management of the Pacific salmon fishery. A stated objective is to ensure that all parties with a significant stake in an issue have equal opportunity to participate, while respecting and maintaining consistency with respect to the law. For further information on this topic, see the 2000 paper, *A Framework for Improved Decision Making in the Pacific Salmon Fishery.*

The provincial and federal governments have a variety of formal and informal arrangements to collaborate on the management of the Pacific salmon fishery. In 1997 both governments signed an agreement on management of the fishery, and a Canada-B.C. council was established. This council was reaffirmed in 2003.

Two Integrated Harvest Planning Committees are key elements of the proposed Salmon Integrated Harvest Planning Process (Figure 28). These are intended to be multi-sector committees that provide advice on

integrated fisheries management plans for the salmon fishery. In addition the committees would identify possible conflicts, and recommend ways to resolve disputes. The committees have yet to be established.

The commercial sector recently elected representatives to eight Area Harvest Committees in the established gillnet, seine and troll licence areas. These committees are to replace previously established advisory boards. The proposed Commercial Harvest Planning Committee will develop draft commercial catch plans for review by a multi-sector Integrated Harvest Planning Committee and provide other advice on issues as necessary.

The Sport Fish Advisory Board (SFAB) has an established local, regional and coast-wide structure. It provides advice to the Minister of Fisheries and Oceans through a broad forum of independent anglers and recreational fishing associations.

DFO's proposed advisory structure would replace existing, less formal processes. There has been little discussion about how First Nations would be represented in this process, however. Without a functioning Tier 1 process for dialogue among First Nations, this model will be very difficult to implement. Some Tier 2 processes already exist on a more regional basis. It is unclear how they would have a meaningful role in the above processes.

THE HALIBUT ADVISORY MODEL

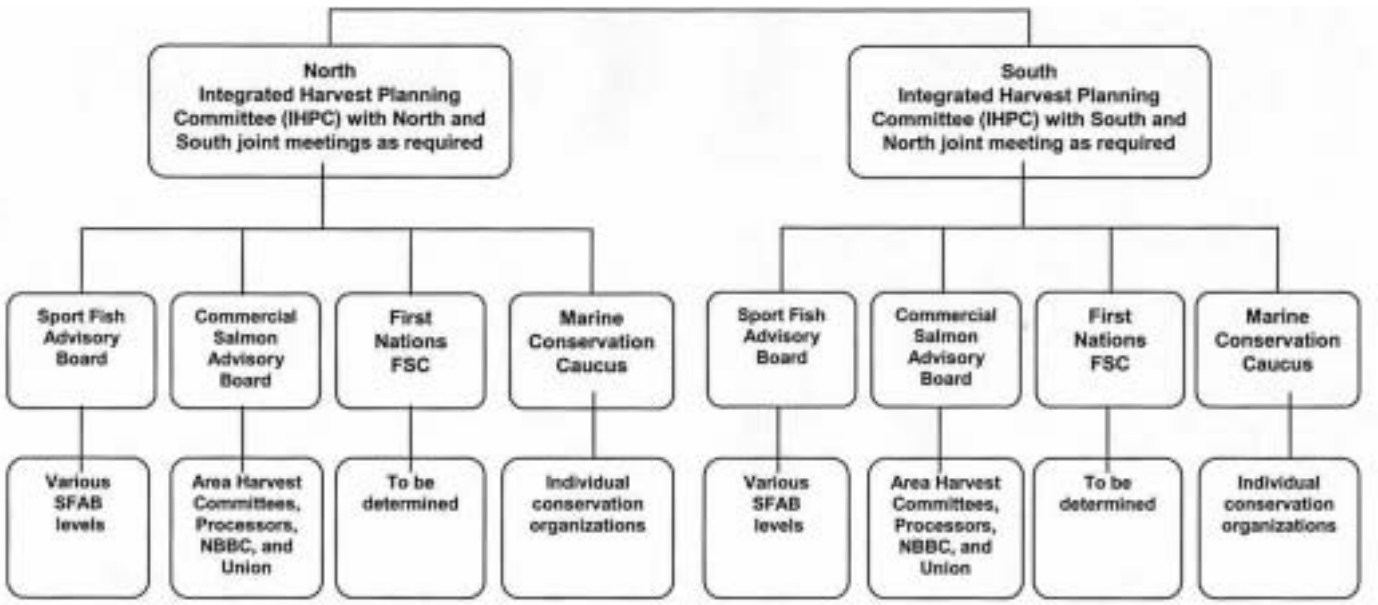
The Halibut Advisory Board (HAB) is another example of an existing multi-sector process. The HAB's mandate includes: advising on annual management plans and fishery policies; management, monitoring and enforcement activities funded by industry; and advising on international issues through the Canadian delegates to the International Halibut Commission.

The membership of HAB includes halibut vessel owners, First Nations, union, processing, recreational fishing, Provincial Government, International Pacific Halibut Commission, and other interests. Most representatives are appointed by DFO, and the halibut vessel owners elect their representatives.

STATUS QUO SUMMARY

The Pacific salmon advisory structure is the product of a consultation on decision-making processes started by DFO in June 2000. The discussion paper on which this consultation was based primarily targeted non-aboriginal fishermen and specifically excluded issues associated with First Nations food, social, ceremonial and treaty-based fisheries. The Institute for Dispute Resolution at the University of Victoria also carried out a review. The latter recognized the need for a separate planning process for First Nations. This is the three-tiered process described in

FIGURE 28 Proposed Salmon Integrated Harvest Planning Process



the previous section. A diagram prepared by the Institute shows how a First Nations process might interact with other sectors (Appendix F). The Institute also cautions that the advisory process "has the potential of prejudicing Tier 2 negotiations where new or changed allocations are made, or where expectations are raised in the non-aboriginal fishery that would negatively affect the government's ability to reach agreements with First Nations."

5.1.2 Tier 1 – Aboriginal Processes

Two working examples of Tier 1 processes are the Northwest Indian Fisheries Commission and the Skeena Fisheries Commission. Both are active in fishery management processes today and are described below. We also discuss a process started by the B.C. Aboriginal Fisheries Commission, the Inter-Tribal Fisheries Framework, that is still in the formative stage.

NORTHWEST INDIAN FISHERIES COMMISSION

The Northwest Indian Fisheries Commission (NWIFC) has existed for 30 years in Washington State. The NWIFC was created in 1974 to address issues arising from the *Boldt* decision, described previously in this report, which affirmed the right of 19 tribes to a 50 per cent allocation of the Washington State fishery. This provided the incentive for the tribes to create an umbrella body that would assist the tribes in better managing and catching the salmon allocation within their "usual and accustomed places." Today, nine board members govern the NWIFC. Unlike B.C. First Nations, the Washington tribes had the benefit of mid-1850s treaties that confirmed their right to fish today.

Also the number of tribes (96 on the Fraser River in B.C. vs. 19 in Northwest Washington), and their geographic dispersion throughout the Fraser River basin, along with their varied cultural and linguistic identities, make the task of organizing a Tier 1 process similar to the NWIFC a challenge in B.C. For example, some B.C. First Nations chose not to work with First Nations involved with DFO, or within the Aboriginal Fisheries Strategy. Also, for different reasons, some First Nations chose not to participate in the B.C. treaty process. Nevertheless, there are several examples of Tier 1 processes in B.C., one of which is the Skeena Fisheries Commission, as described below.

SKEENA FISHERIES COMMISSION

An example of a functioning Tier 1 process in B.C. is the Skeena Fisheries Commission (SFC). The Commission was formed in 1991 and is made up of the Tsimshian Tribal Council, the Nato'oten (Lake Babine Band), the Wet'suwet'en (two communities) and the Gitxsan (six communities). Its purpose is to assert aboriginal management authority throughout the Skeena River watershed. The population of the Skeena Region is about 54,000 people, of which 42,000 are non-aboriginal.

The leadership of the Commission remains committed to four principles:

- the aboriginal right to fish for social, ceremonial and economic purposes,
- their dependence on the fisheries resource as a mainstay of economic, social and cultural well-being,
- the right to fish supersedes non-aboriginal fishing interests after conservation needs for threatened stocks, and
- each participating First Nation is obliged to protect, conserve and catch the fishery resource according to traditional law.

An important focus of the SFC was to build equal partnerships with various fisheries interests to ensure that distinctive management approaches would be respected and coordinated as follows: among the communities of each Nation; between the Nations; and among the Nations, Canada, B.C. and participants in the fishing industry. The success of the SFC was based in part on it being created at a time when the courts were recommending formal and informal agreements between aboriginal groups and government, and with various resource users. Moreover, there were concerns about the effect of mixed stock fisheries in the Skeena on coho and steelhead and interests in getting First Nations working with other interests in the watershed.

Thus, broad political, legal and resource management developments contributed to the DFO's readiness to negotiate a Skeena Watershed Agreement with the SFC member nations under its Aboriginal Fisheries Strategy program (AFS). The AFS enabled the nations to develop a coordinated approach to conservation and management of the fisheries allocated to the member communities from tidewater to headwaters.

The SFC oversaw the training and employment of fishery guardians, whose duties included fish stock assessments, provision of fish catch information to the SFC and DFO, monitoring fish sites, and patrols to monitor fishing and habitat activities.

One benefit was the ability of Skeena Nations to have control over fish allocated for food, social and ceremonial purposes, and for commercial purposes. Each First Nation administered a communal licence, and was entitled to catch and sell the fish allocated to it, on the condition that the catch was caught at or transferred to one of three landing sites. Profits from sales were returned to the Skeena Watershed Trust, which was controlled by the SFC. These Pilot Sales fisheries were conducted under ESSR permits as discussed in Section 2.3.

The Skeena Fisheries Commission was also a key player in the Skeena Watershed Committee, a Tier 3 process discussed elsewhere in this report.

INTER-TRIBAL FISHERIES FRAMEWORK

The B.C. Aboriginal Fisheries Commission started an ambitious effort about five years ago to establish a coast-wide Tier 1 process, called an Inter-Tribal Fisheries Framework. The framework envisaged a process by which First Nations would work together to develop inter-tribal conventions which in essence would be multi-lateral treaties. The conventions would require formal ratification by individual First Nations before taking force. The framework process was started in 1999 but has not gained wide support. Other proposals included a convention on First Nation fishing rights, protection of wild salmon, and inter-tribal co-management of shared stocks. This experience highlights the difficulty of developing Tier 1 processes. A hurdle encountered was getting formal representation from individual First Nations. This hurdle will only be overcome through motivation and buy-in at the grass-roots level. To be successful the Tier 1 process has to address all these issues.

TIER 1 SUMMARY

The idea of having Tier 1 processes in major watersheds or coastal areas across B.C. that share fish stocks has merit. An important principle underpinning the Tier 1 process in the Skeena – one that could be repeated elsewhere – is that various First Nations or tribal groups involved in a natural management area agree to work together on common issues. The advantage is that the First Nations involved can present a united position on allocation and management. This has benefits for First Nations through economies of scale, and benefits other resource users and governments through more efficient and effective communications.

Moreover, government and the general public are concerned about certainty. Uncertainty is created in part by indecision. The lesson of Judge Boldt's decision is that it created certainty for all Washington State sectors by affirming the tribes' rights to a 50 per cent allocation in the fishery. The incentive to deal with that allocation in a responsible way led to the tribes developing a Tier 1 process as the first of many steps towards becoming responsible managers in the contemporary fishery.

First Nations need to see benefits from organizing themselves. Currently most see little benefit from organizing around sharing of access to fish for food, social and ceremonial purposes. Instead they choose to work bi-laterally with DFO. The sharing of an assured commercial fish allocation and conservation of fish stocks in a larger region or area is more likely to motivate more First Nations to engage in meaningful Tier 1 processes.

5.1.3 Tier 2 – Aboriginal / Government Processes

Examples of Tier 2 processes are the Joint Fisheries Committee under the Nisga'a Final Agreement, and the developing process in the Fraser River watershed.

NISGA'A JOINT FISHERIES COMMITTEE

As described in Section 2.4, the Joint Fisheries Management Committee (JFMC) established under the Nisga'a treaty is an example of an existing Tier 2 model. A similar model is being generally applied at other treaty tables which have reached the Agreement in Principle stage.

The Nisga'a JFMC conducts activities in four areas:

- fisheries management in cooperation with DFO at all planning and assessment stages,
- catch monitoring,

- escapement monitoring for management purposes, and
- enforcement.

The JFMC strives for decisions by consensus. In the absence of consensus both parties submit their recommendations and advice to the Minister.

HISTORY OF THE TIER 2 PROCESS IN THE FRASER WATERSHED

A Fraser Watershed process was established in 1993 to facilitate dialogue between Fraser First Nations, and between First Nations and the DFO. This combined elements of Tier 1 and Tier 2 processes. The original Watershed Agreement established a Tier 2 Watershed Steering Committee in 1993. The Committee involved representatives of First Nations who were signatories to the Agreement as well as bilateral fisheries agreements. DFO also participated in the Steering Committee. When the Fraser Watershed Agreement expired in 1999, a new Fraser River Aboriginal Fisheries Forum was created to fill some of the roles of the Watershed Steering Committee. The Forum maintained most of the exchange of information but had no decision-making role nor structured criteria for participation by the parties.

The Fraser River Aboriginal Fisheries Secretariat was established in 1994, and continues to operate. The functions of the secretariat include:

- co-coordinating Forum meetings,
- co-coordinating Tier 1 Fraser River First Nations meetings,
- distributing information and regular publications among the members including Watershed Talk and Watershed Quarterly Journal,
- conducting technical analyses in the Fraser River watershed based on First Nations' perspectives, and
- providing a technical link for the Fraser Panel, of the Pacific Salmon Commission. The Fraser Panel negotiates details of the implementation of the Pacific Salmon Treaty for Fraser sockeye and pink salmon in addition to in season management responsibilities for commercial fisheries in both counties.

There have been difficulties in developing a Tier 2 process with all Fraser River First Nations. In order to participate in 1993, for example, Fraser First Nations had to sign a Fraser Watershed Agreement with DFO negotiated under the AFS. While some First Nations negotiated Pilot Sales under the AFS, others were asked to agree to allocations for their food, social and ceremonial fish. Some First Nations refused to sign the Watershed Agreements because they were required to specifically define their needs for fish, which was something many were unprepared to do.

The Fraser River provides an example of emerging Tier 1 and Tier 2 processes.

TIER 2 SUMMARY

An effective Tier 2 process is essential because of the fiduciary relationship between aboriginal people and government. The Tier 2 process adds order and structure to such discussions.

Tier 2 processes are meant to allow discussion on a regional scale and improve communications between First Nations and DFO. Tier 2 processes exist on local scales throughout B.C. Some have been established through the B.C. treaty process, while others have been established through the AFS and local initiatives.

Broader Tier 2 processes between aboriginal peoples and DFO are necessary on a regional basis, for example, to coordinate conservation and management of migratory fish, particularly salmon.

The advantage of the Tier 2 process is that it provides First Nations with the opportunity to have input into broader level decisions affecting fish stocks in their territories. It is often difficult to make decisions in a timely manner in large groups. The Washington Tribes recognized and addressed this in 1974 when they established a five-person commission based on their five original treaties. This allowed them to make decisions and speak with one voice when dealing with government. It improved the effectiveness and efficiency of decision making by the tribes and government.

The advantage for the resource is that this sharing of information leads to a better understanding of the needs and requirements of both people and fish.

That said, First Nations recognize the need for dialogue with third parties. Existing DFO processes, as described in the status quo section of this report, attempt to involve all parties without the important and necessary Tier 1 and Tier 2 processes. The difficulty of developing Tier 3 processes without supporting Tiers 1 and 2 is evident in the examples shown in the next section.

5.1.4 Tier 3 – Multi-sector Processes

The West Coast Vancouver Island Aquatic Management Board and the Skeena Watershed Committee are examples of Tier 3 processes in B.C.

WEST COAST VANCOUVER ISLAND AQUATIC MANAGEMENT BOARD

The West Coast Vancouver Island Aquatic Management Board (the AMB) is a three-year national pilot set up in 2001 under an agreement between the Nuu-chah-nulth, Canada (DFO), B.C. and local governments. It is the only fully operational board in Canada established by the Minister of Fisheries and Oceans under the *Oceans Act,* and is a unique example of multi-party cooperation in aquatic resources in B.C. The Board consists of 16 representatives: two each from the federal, provincial, Nuu-chah-nulth, and regional governments, and eight from non-governmental aquatic resource interests. AMB decisions are made by consensus.

The AMB's mission is to ensure that "the aquatic resources of Nuu-chah-nulth Ha-houlthee (a defined area on the West Coast of Vancouver Island) are managed by people working together for the benefit of current and future generations of aquatic resources, people and communities."

The purpose of the Board is to participate in all aspects of integrated management of aquatic resources in the management area. Its objectives are to:

- protect, maintain and rehabilitate aquatic resources,
- manage aquatic resources on an ecosystem basis,
- respect and protect First Nations' food, social and ceremonial requirements and treaty obligations,
- support precautionary approaches to aquatic resource management,
- consolidate information relating to different aquatic resource uses and utilization to provide a holistic picture of the health of ecosystems within the management area,
- integrate expertise and knowledge from First Nations, local, scientific, and other sources,
- ensure opportunities for coastal communities and other persons and bodies affected by aquatic resource management to participate in all aspects of integrated management, protection and restoration of aquatic resources, and
- foster initiatives that maintain or enhance opportunities for coastal communities to access and benefit from local aquatic resources, while achieving sustainable social, cultural, and economic benefits from the integrated management and harvesting of aquatic resources for British Columbians and other Canadians.

After only two years of operation, the AMB has posted some notable successes and is involved in a wide range of activities (see www.westcoastaquatic.ca). It is developing some innovative new models while building relationships between various groups. As a means of creating new approaches, building capacity and identifying areas of common ground between groups, the AMB appears to be successful.

However, funding for the Board has been significantly less than anticipated, which has restricted the Board's ability to fulfill its mandate. Also, the Federal and Provincial Governments have not used the Board fully, although they are beginning to seek the Board's advice or services on policy issues and issues of a coast-wide nature. Still, the value of the Board to Nuu-chah-nulth First Nations and local communities is high as a working model of shared management. All participants are positive about its long term potential.

SKEENA WATERSHED COMMITTEE

While the Skeena Watershed Committee (SWC) no longer exists, it is a useful example of a Tier 3 process that functioned for about four seasons beginning in 1993. A common interest of the SWC was conservation of steelhead in the Skeena drainage. Its members included aboriginal and non-aboriginal representatives. The five parties who participated were commercial fishers, recreational fishers, B.C., DFO and the Skeena Fisheries Commission.

The SWC's core purposes were:

- to determine management, protection and allocation of fish under consensus arrangements,
- to maintain open dialogue on the health and use of the fishery resource, and
- to work towards an integrated watershed management process.

Discussions were facilitated by the existence of a functioning Tier 1 process – the Skeena Fisheries Commission – as described under Tier 1 in this section. The group worked for several years but stopped meeting when it was unable to agree on a fishing plan for the next year.

TIER 3 SUMMARY

An advantage of the AMB and Skeena Watershed Committee was that it included First Nations representatives selected through First Nation political processes. The decisions arising from such processes have greater legitimacy than those from DFO's existing advisory process.

The Skeena Watershed Committee benefited from an effective Tier 1 process. It failed because it was unable to resolve difficult allocation issues over steelhead. Nevertheless, it was a good example of people working together for the benefit of the resource. The Skeena Watershed Committee was not originally a government initiative.

The AMB is also a local initiative, but received government support as a national pilot. Here, it has not met its full potential because it has been given less authority and less financial support than envisioned by local people.

It is interesting to consider how these new processes in B.C. compare with Tier 3 processes in Washington State. There, the state accepted the tribes as co-managers of the resource when the tribes obtained specific allocations according to a ruling of the US Supreme Court. In Canada, government has not yet acknowledged the management authority of First Nations. As discussed in the legal background section of this report, that management authority is an outcome of First Nations aboriginal title and rights.

After Judge Boldt's decision, the U.S. government immediately recognized its obligation to provide adequate resources and funds to the tribes. Moreover, it provided voting and veto power to the tribes in new fishery management structures, such as the Pacific Fisheries Management Council and the Pacific Salmon Commission. While there is not a similar court decision in Canada, there are good reasons why the Canadian government should move in a similar direction.

5.2 Allocation Options

This section describes a variety of options for the allocation of fisheries resources. We are not recommending a single approach to allocation because different approaches may be more appropriate for different species or fisheries. From the point of view of First Nations it is also important to maintain flexibility. Current allocation systems are complicated by the complex history of decisions related to licensing and catch shares. In general, fisheries that have changed to Individual Fishing Quotas (IFQs) are amenable to a proportional catch sharing approach with little change.

5.2.1 Status Quo

A number of policies or processes exist for maintaining fish catches or for transferring shares between fishing sectors. As summarized below, these are described in a general way in DFO's allocation policy and examples of fish transfers affecting First Nations exist in treaty arrangements or Agreements-in-Principle (AIPs).

ALLOCATION POLICY

As touched on in section 2.2, DFO's allocation policy for salmon states that: "After conservation needs are met, First Nations, food, social and ceremonial requirements, and treaty obligations to First Nations have first priority in salmon allocation." The policy deals primarily with salmon and establishes a priority for the recreational fishery over the commercial fishery for chinook and coho. It also guarantees 95 per cent of chum, sockeye and pink to the commercial fishery with a maximum of five per cent for the recreational fishery. In a later decision, the recreational halibut share was recently capped at 12 percent of the overall commercial and recreational

catch. A mechanism has yet to be developed for compensation of the commercial sector if recreational halibut allocations exceed the 12 percent cap.

Within the commercial sector, various ad-hoc arrangements are in place to maintain salmon catch shares between seine, gillnet and troll sectors on the North and South Coast. These are periodically reviewed to account for changes in species availability. There is no allocation within the recreational sector between independent anglers and those catered to by fishing lodges and charter businesses.

The allocation policy also describes the process for transfers to First Nations as a result of treaties saying:

"Where commercial fisheries allocations are fully subscribed, and these fisheries must be reduced to provide for treaty allocations, steps will be taken for an appropriate number of commercial licences to be voluntarily retired from the commercial fishery."

The allocation policy also proposed to establish an allocation board to implement established allocation policies and provide advice to the Minister on changes as requested. The board would deal with commercial and recreational fisheries for all species. The board has not yet been established and further consultation is proposed.

TREATIES AND AIPs

Several approaches have been implemented for transfers of fish in modern treaties and AIPs.

The Nisga'a Final Agreement is the only modern B.C. treaty and has several fisheries components. The first is a treaty allocation to the Nisga'a of a specified share of the return for all Nass salmon species. This includes a domestic (food, social and ceremonial fishery) and a communal sale allocation. The second is a long term catch agreement outside the treaty that provides allocations of sockeye and pink salmon defined as a percentage of the adjusted Total Allowable Catch. Because the catch agreement is outside the treaty, it operates subject to the same rules as the commercial fishery. In addition the Nisga'a received cash to buy fishing licences for participation in commercial fisheries.

A similar approach to that taken by the Nisga'a is being followed with Agreements-in-Principle for First Nations in the B.C. treaty process. For example the Tsawwassen AIP included commitments for catches of up to 0.78 per cent of Fraser River sockeye and pink salmon and 3.27 per cent of Fraser River chum salmon. In addition, $2 million is provided to increase the Tsawwassen Nation's commercial fishing capacity and to establish a fisheries fund. By contrast, the Sliammon First Nation AIP deals only with allocations for food, social and ceremonial purposes. The Lheidli T'enneh AIP provides for a modest up-river commercial fishery under a catch agreement outside of the treaty, and for a First Nation fisheries management trust fund, the quantum of which has yet to be negotiated.

Fish allocations held in treaties are long term obligations. Generally they are not liquid assets that can be bought and sold. One approach with commercial licences has been to issue them as non-transferable communal licences that belong to the community and not individuals.

One premise in the treaty process is that financial mandates for treaties are more or less fixed. First Nations have the option of deciding whether it is in their best interest to invest in the fisheries (whether through purchase or retirement of licences) or other assets. Some First Nations have invested in fisheries but others elect to invest in other assets.

PROBLEMS WITH THE STATUS QUO

While DFO's allocation policy recognizes the priority of aboriginal and treaty rights, it is unclear whether it will include economic access to fish. In the case of the Nisga'a (and the applicable B.C. AIPs), the commercial salmon allocations are in a catch agreement outside the Nisga'a Treaty (or proposed treaty). Also, with a few exceptions such as the Lheidli T'enneh, who are studying fresh fish and value added sales in the Prince George area, the allocation policy doesn't provide interim measures for economic access in the fishery.

At some point in the future, major changes are expected in fish allocations through treaties. The process has been slow. This has resulted in uncertainty that affects everyone with an interest in the fishery, including First Nations. One approach that would resolve this

uncertainty would be to provide interim target allocations to First Nations for economic purposes during negotiations. There might be negotiated changes to these allocations by the time treaties are concluded that address the rights and needs of specific First Nations.

5.2.2 Community Quotas

An alternate model for holding licences was proposed to the Panel during its public hearings in Nanaimo. In this model, called a conservation trust, a community board would hold licences or fish allocations and distribute fishing opportunities to community members through various means. The board could represent all community members and not necessarily be limited to First Nations. This model has been developed on the West Coast of Vancouver Island.

The approach is similar to Community Development Quotas (CDQ) in western Alaska, a concept that was established in 1992. It involved Alaska Native communities in the vicinity of the Bering Sea and Aleutian Islands. The goal of the program was community development and the initial allocation coincided with a major structural change in the industry toward more at-sea processing. The initial allocation was 7.5 per cent of the Bering Sea Pollock quota. This was expanded to include halibut, sablefish, Atka mackerel, Pacific cod and crab. Allocations in halibut and sablefish fisheries were made to western Alaska communities with the advent of IVQ fisheries in Alaska. Similarly, in New Zealand, fish transfers to the Maori occurred at a time when the Quota Management System was created. Major changes such as this often create an opportunity to address other issues such as indigenous rights.

The CDQ proposal is modeled after the *Alaska Native Claims Settlement Act* in which assets were transferred to Alaska Native corporations. Additional conditions of CDQs involved government oversight of all business activities, community based shareholders instead of individuals and a requirement that all investments be fisheries related. One criticism of the CDQ program has been the lack of a well-defined governance structure involving the quota holders, the communities they represent and the state and federal personnel involved in program oversight.

One advantage of Community Development Quotas is the fostering of local economic development in the fishery and in the processing sector. Since 1992, the CDQ program created approximately 9,000 jobs with wages totaling more than $60 million U.S. for western Alaska residents. The CDQ program has contributed to fisheries infrastructure development in western Alaska. It has also provided vessel loan programs, education, training and other CDQ related benefits.

It is important to define at the outset who the intended beneficiaries of community quotas are. For example it could be difficult to determine the beneficiaries in a community that includes both aboriginal and non-aboriginal people as proposed in the Conservation Trust model above. In the case of a First Nations community, whether treaty or non-treaty, it is straight-forward because the members are clearly defined.

In the case of the Maori, a defined commercial allocation was held in trust by a company until it could be distributed to the various Maori interests. This was an interim step that provided benefits to Maori fishers, and a structure that could be managed for the growth of Maori assets.

5.2.3 Exclusive Fishing Areas

In this approach, a fishing area is set aside for First Nations harvest such as a traditional fishing location, a river, a bay, or an inlet to meet First Nations food and societal as well as economic needs. In B.C. small areas are already set apart from the commercial fishery for First Nations food, social and ceremonial fishing to ensure adequate access to species such as crab, prawn, or clams. This was also done in New Zealand where areas are set aside for Maori food needs.

There are advantages to this approach for sedentary species or species that are fished year after year in local areas, such as returning salmon or spawning herring. It could lend itself to more sustainable fisheries by encouraging better stewardship of small stocks. This approach would also have close parallels in traditional ownership systems of fishing areas or fishing sites.

One example of an exclusive commercial allocation is the halibut fishery at the village of Metlakatla, Alaska. The Metlakatla tribe was not a party to the *Alaska Native*

Claims Settlement Act and the federal government retained jurisdiction over the waters surrounding the Annette Island Reserve. One outcome was that the tribe received an annual allocation of halibut that has ranged from a high of 126,000 pounds in 1996 to a low of 12,000 pounds in 1998. The catch in 2003–2004 was 84,072 pounds.

Another suggestion was for commercial salmon allocations in terminal areas that are supported by hatchery production. It was proposed that hatchery production be shared with 50 per cent going to the tribe and the remainder to the commercial fishery. This proposal is similar to developments in Washington State where benefits of tribal hatcheries are shared with non-native fishers.

5.2.4 Usual and Accustomed Means

Another proposal is that First Nations continue to fish with usual and accustomed means such as a dip net or hand net, perhaps for a set number of fishing days per week, without any specific allocation. For management purposes, First Nation catches would be estimated by DFO or First Nations themselves based on expected resource abundance and past fisheries. This would be similar to the current DFO management of food, social and ceremonial fisheries in which First Nations often do not participate in setting fish allocations and as a result allocations are flexible and set for management purposes only. It would be important to evaluate this type of fishery against management objectives such as long term economic viability. This would have to be done on a fishery by fishery basis.

5.2.5 Fixed Quota

In this example the First Nation's annual share is a fixed quantity or amount. An example might be the requirement for food, social and ceremonial fisheries or a share of a commercial fishery where abundance does not change significantly from year to year. Increases in quota may be transferred or purchased voluntarily from the commercial or recreational sectors. This approach has been followed on a small scale in a few fisheries such as the commercial herring spawn-on-kelp fishery which is managed through Individual Fishing Quotas (IFQs).

For example, the Heiltsuk have a fixed allocation of herring spawn-on-kelp of 240,000 pounds. In 2004 there were 635 participants in this fishery. In this case, commercial licences were retired to address the Heiltsuk aboriginal right to fish herring spawn-on-kelp for commercial purposes. The Heiltsuk did not place a limit on the number of participants in the fishery but set individual catch limits. Participants were allowed to work together in pools to achieve their overall catch limit.

A communal herring spawn-on-kelp licence belonging to the Skidegate Band Council is managed in a similar way with 16 individuals receiving allocations of 1,000 pounds each. These approaches are economically efficient in that participants know their maximum catch and can better anticipate their revenue and costs.

5.2.6 Percentage Share

In this approach a First Nation's share of fisheries is a fixed percentage of the total allowable catch and varies with resource abundance. This is being followed in some treaty allocations and catch agreements for commercial purposes. Pilot Sales allocations were also based on abundance. This approach is most often applied when the resource abundance fluctuates from year to year. Shares determined using this method are responsive to resource abundance and scarcity.

A variation on this approach involves negotiation of an abundance based formula which sets the catch as a proportion of some abundance indicator, and makes allowance for fluctuations in abundance.

This approach is very similar to Individual Fishing Quotas (IFQs) used in many Canadian fisheries. One difference is that this is a communal allocation and it is up to the First Nation to allocate it among fishers.

5.3 Implementation Issues

This subsection touches on some of the implementation issues that may arise from the proposed changes. We are recommending significant fish transfers to First Nations and a shift in management and decision-making from coast-wide to local processes. First a few major implementation issues that apply to most B.C. fisheries are considered. Then we will deal with two specific fisheries, salmon and halibut.

The general issues are:

- What has changed and why should this be done at this point in time?
- What are the cost implications of a major buy-back?
- How do we know that a buy-back will achieve the desired results of improving First Nations economic and social conditions?
- How will this affect previous efforts to maintain First Nation participation in fisheries?
- Will this mean greater privatization of B.C. fisheries through Individual Fishing Quotas (IFQs)?

Why do this now?

Canada and B.C. are considering changes to B.C. fisheries that will accommodate greater First Nations participation in fisheries. A Federal-Provincial task group was asked to make recommendations on a post-treaty fishery. While many B.C. fisheries are healthy, some fisheries such as the Pacific salmon fishery are in dire straits despite significant structural changes over the past decade. Salmon fishers are likely to see more changes in order to ensure sustainable fish populations. Times of major change are sometimes opportunities to build a stronger and more durable economy. Resolution of aboriginal rights and claims should be seen not as a threat but an opportunity to strengthen the B.C economy and improve the circumstances of B.C.'s first peoples.

What are the cost implications of a major buy-back?

DFO has been acquiring licences and transferring them to First Nations at a rate of about $4 to $6 million per year over the past ten years. If we continue on the present course it would take many years to achieve anything close to an equal sharing of fisheries resources for B.C.'s First Nations. The estimated value of all B.C. licences and quota is approximately $1.8 billion. Investment of half that amount ($900 million) in First Nation fisheries access would lead to much greater stability and certainty in the fishery. To put this in context, this is less than one years' production as the B.C. seafood industry generates about $1.04 billion annually.

How do we know a buyback will achieve the desired economic and social results for First Nations?

Obtaining fish allocations is only the first step in creating economically viable First Nation fisheries. It will be important to avoid the pitfalls already experienced in the development and management of other fisheries. Developing First Nations fisheries will be subject to the same pressures that other fisheries have experienced including too many fishers and overinvestment in boats and equipment unless this is controlled from the start. Catch shares for First Nations present opportunities to develop value-added industries that provide more local benefits.

How will this affect previous efforts to maintain First Nation participation in fisheries?

Over the years various programs have attempted to maintain First Nation participation in fisheries. One approach to this issue that was taken in the most recent Mifflin Plan was setting a goal of not disproportionately reducing First Nation participation in a particular fishery.

Will this mean greater privatization of B.C. fisheries through Individual Fishing Quotas?

Individual quotas are a tool that have proven useful in some B.C. fisheries. They have also been suggested for other fisheries such as salmon and rockfish. A serious negative impact for First Nations is that the introduction of IVQ programs will increase the cost of fisheries settlements in treaties. For that reason we recommend that there be a moratorium on new IVQ programs unless First Nation interests in those fisheries — including allocations — are first addressed.

Individual Fishing Quotas or IFQs (which include IVQs) were examined by the Ocean Studies Board of the National Academy of Science in 1999 after the U.S. put a moratorium in place on new IFQ programs in 1996. Their study involved a review of IFQs worldwide including Canada, New Zealand and Iceland and listed the following advantages and concerns:

ADVANTAGES: IFQs were identified as a highly effective way of dealing with overcapitalization in the fishing industry. Consumers also benefited by being able to buy fish over longer periods of the year. Opportunities exist to improve the quality of the catch, reduce bycatch and in some cases, to reduce gear conflicts and improve safety in the fishery.

CONCERNS: These included the fairness of initial allocations, effects of IFQs on processors, increased costs for new fishermen to gain entry, consolidation of quota shares, effects of leasing, elimination of vessels and reductions in crew, and the equity of gifting a public trust resource.

The conclusion was that IFQs should be allowed as an option in fisheries management but that issues of initial allocation, transferability and accumulation of shares should be given careful consideration when IFQ programs are considered and developed.

One of the Ocean Studies Board's recommendations for implementation was the inclusion of fishing communities in initial allocations. Also, that the "gifting" of quota shares to present participants in a fishery should not be taken for granted. It should not be assumed that vessel owners would be the only recipients of quota, nor would historical participation be the only measure for determining initial allocations. Transferability was identified as one of the most critical elements in design of an IFQ program, one that depends on the goals and objectives of the management regime.

Given these general considerations we next turn to two quite different examples of how our vision might be achieved.

SALMON

There have been dramatic changes in the way salmon fisheries in B.C. are managed over the past decade. Changes have occurred to conserve less productive salmon stocks and to protect salmon populations that are at risk of disappearance. As well we must address equity issues concerning First Nation participation in the fishery.

Management of the commercial salmon fishery is complex and the fisheries have numerous challenges, including dwindling catches, poor prices and reduced fishing time causing many vessels to lie idle for most of the year. It is difficult if not impossible to alter these fundamental problems in the fishery. Significant investment in changes took place in the mid-1990s including a buy-back of 50 per cent of eligible licences. This cost $195 million over a four-year period ending in 2001. It was hoped that reduced fishing capacity together with conservation measures would create the conditions necessary for healthy coastal communities and a robust and diverse fishery resources. Benefits from these changes have not been realized. Licence values changed little during the buyback and the estimated total licence value of the remaining commercial fleet is $237 million.

Recreational fisheries are in better shape. Revenues from tidal and freshwater fisheries were estimated at $675 million in 2002, which is approximately equal to the commercial landed value of all B.C. fisheries. Growth in the 1990s was curbed but long term growth is expected to continue. Current First Nation participation in the industry in terms of ownership, joint ventures and employment is very low. There are opportunities for First Nations to create sustainable businesses and employment in the recreational fishing industry but they need to be more fully explored.

The vision is for a shift in emphasis as to where fish are caught – from interception mixed-stock fisheries towards terminal fisheries. This shift is already occurring through precautionary management of salmon fisheries due to concern for weak stocks and protection of species at risk. Development of local terminal fisheries will create new market opportunities for value-added fish

products. Positive results of such changes will include a higher abundance of wild salmon stocks and more resilience to threats such as climate change. A challenge for First Nations will be to develop fisheries that are profitable and that improve the economic and social well being of their members.

First Nation participation (number of licences) in the commercial salmon fishery has steadily declined since the 1950s. First Nations groups or individuals held 666 out of 2221 commercial salmon licences in 2002. Of the First Nation licences, 567 were not transferable to non-aboriginals. Participation varies greatly depending on gear and area. By comparison the recreational fishery provides some employment opportunities, but few First Nations are involved in recreational fishing businesses. Reduced exploitation rates in mixed stock ocean fisheries are likely to continue. Choices include how to access the fish that are available and how to get more value from the fish

New allocation models that may be applied to First Nation fisheries include catch shares both in ocean and river fisheries as well as terminal area fisheries. IVQs have improved the profitability of other B.C. fisheries. Implementation of such models in salmon fisheries would be challenging since fishing takes place over short periods and catch limits for some fisheries are set in-season on short notice and may not be practical. It may be more feasible in troll fisheries where fisheries for species such as chinook are managed to an annual quota.

The commercial salmon fishery has a variety of licence categories, some designed to maintain First Nation participation both on an individual and a communal basis. More flexibility is needed for how these licences might be used to address First Nations' claims in the fishery. One possibility is to retire these licences and convert them to communal licences or catch shares. Licence holders should be the ones to decide whether or not to maintain existing individual licence categories such as N and A-I.

HALIBUT

Halibut stocks are healthy, standing above the long term average, but there are equity problems in the fishery. First Nation participation in the fishery is low – less than 12 per cent based on the number of licences, of which about half are communal licences. The number of licences doesn't necessarily reflect true First Nation participation in the fishery since only about half of all licences in the fishery were actually fished in 2003. In addition licence holders realize most profits in the fishery. For example, although halibut prices have recently been over $4 per pound, halibut quota can be fished for as little as about $1 per pound. Thus gains from the halibut fishery may be realized more by investors than by fishers.

Transfers of halibut and sablefish quota to First Nations can be readily accomplished under the existing IVQ system. One barrier to transfers of halibut will be recent increases in the cost of quota. The management system currently offers considerable flexibility in terms of time and place of fishing. However there is a theoretical limit to the number of vessels fishing based on the 435 Category L-licences. Currently approximately half of all licenced boats actually fish in a given year.

First Nations should be offered the opportunity to fish under the existing licencing system or by managing a separate communal catch share. If fishing is to be done under communal catch shares, then it is recommended that First Nations not require a licence and that they have the flexibility of transferring quota between vessels. This will allow First Nations to more equitably distribute benefits among their membership. Transfers of quotas or quota shares to First Nations will have little impact on the way the fishery is currently managed.

6 *Recommendations*

THE FOLLOWING SEVEN RECOMMENDATIONS ARE INFORMED by numerous written and oral presentations to the Panel as well as work commissioned for this review process. Implementing the recommendations is essential for many reasons including:

- restoring a measure of equity to fisheries allocations for First Nations in the province,
- ensuring adequate fisheries resources are available for aboriginal food, social and ceremonial (FSC) purposes,
- creating meaningful and lasting economic opportunities relating to fisheries for First Nations,
- elevating the management role of First Nations to a level that is commensurate with their rights and interests in fisheries resources,
- promoting workable solutions on allocations of shared fisheries resources between First Nations, and
- ensuring a greater effort is made to conserve and where possible rebuild fisheries.

These recommendations are directed at Canada but may also include British Columbia because of its role in the B.C. treaty process and its delegated responsibility for freshwater fisheries.

RECOMMENDATION 1:

Canada immediately take steps to ensure First Nations have access to adequate quantities of fisheries resources for food, social and ceremonial purposes.

For many reasons, First Nations throughout the province do not or can not get access to enough fish for food, social and ceremonial purposes. This is unjust. Next to conservation of stocks, aboriginal people have a legally protected first right of access to fisheries for food, social and ceremonial purposes.

The reasons for lack of access are many and include depleted stocks, difficulty in managing disproportionately large allocations to commercial and recreational fishing interests, First Nations paying the price of fisheries conservation after other interests are served ahead of theirs, a reduction of vessels and licences in coastal communities, and others.

Where conservation contributes to shortages of fish stocks for FSC purposes, DFO has an obligation to identify alternate stocks or species that can be used by First Nations to offset those losses. And if fisheries are mismanaged, with commercial and recreational interests served ahead of First Nations, compensation should be provided.

Alternate approaches to fisheries management also must be considered to ensure FSC needs are met. One example of this already occurs on the Skeena River. Commercial fishers deliver salmon to upriver First Nations in an effort to reduce fishing pressure on Nanika sockeye near where this run spawns. This highlights how different sectors can work together. However, it must be mentioned that it interferes with traditional practices and should only be used as a last resort and with the consent of the affected First Nation.

Finally, subject to conservation needs, the number of fish caught in FSC fisheries must rise and fall in tandem with First Nation populations and needs. First Nation populations are increasing, therefore FSC allocations over the long term must as well.

RECOMMENDATION 2:

As a starting point and an interim measure, Canada should take immediate steps to allocate to First Nations a minimum 50 per cent share of all fisheries, with the understanding that this may eventually reach 100 per cent in some fisheries.

Major allocations of fish must be transferred to First Nations for economic purposes. Interim allocations should include all B.C. fisheries. Failure to do so will result in prolonged economic uncertainty for all fisheries sectors, time-consuming and costly court cases and ongoing tensions between parties as First Nations exercise their rights through "underground" fisheries. This sharing of resources should occur only after FSC needs are met.

The Panel's recommendation for a 50 per cent share as an interim step is an attempt to reconcile aboriginal and crown title and recognizes that First Nation rights to fisheries are at least as important as others in the commercial and recreational fishing sector. As aboriginal title is the underlying title, then putting it on a more equal footing in the interim is justified. This does not mean that all issues are resolved. The important point, however, is that we need something in place now that creates the conditions for positive changes in the future. Significantly, it is already being put into practice in a limited way for new fisheries. For example, as a matter of policy DFO issued half of all new licences in the sardine fishery to First Nations.

This recommendation recognizes that in some cases First Nations may prove through rights and title arguments that their share of certain fisheries should be up to 100 per cent.

This reallocation, which is based on aboriginal title and rights, should not depend on whether First Nations have signed treaties, are in treaty negotiations or have rejected treaty negotiations. If engaged in treaty talks, the allocation could be settled through Interim Measures Agreements (IMAs) or Final Agreement negotiations. All options for accessing fish for commercial purposes should be open for negotiation, including treaty allocations, long-term catch sharing agreements or purchasing licences in the commercial fishery. Results of negotiation will depend on the interests of individual First Nations including their rights in the fishery.

At the same time as this reallocation occurs, it is important to consider a backdrop to allocation and management issues, particularly as it applies to salmon. Salmon fishery management is becoming more precautionary as fisheries managers attempt to deal with stocks at risk. This precautionary principle was much in evidence in recent years as open-water, mixed-stock fisheries were reduced in order to preserve and attempt to rebuild endangered runs of coho salmon. This is a new long-term management direction. A consequence of it will be opportunities for terminal fisheries on healthy salmon stocks. There is a potential benefit in this in that if the end result is that endangered or threatened stocks become more plentiful, there will be more fish available to catch in all fisheries. And that is to everyone's benefit.

RECOMMENDATION 3:

First Nations themselves must address intertribal allocations.

There is an obvious need for First Nations to cooperate with one another when it comes to deciding on allocations of fisheries resources, particularly passing stocks. Rather than having allocations imposed by DFO, First Nations should work together at a regional level (for example those with common interests on the Fraser, Skeena or Coast) to equitably allocate resources. Resources will be needed to assist in putting the necessary processes in place to achieve this result.

Incentives are required to ensure that such cooperation occurs. One incentive that would ensure all Nations come together to work out allocations would be that everyone agrees or no one fishes. The underlying goals of all allocation discussions should be conservation first and equitable distribution second. Disputes arising over what constitutes a fair share are almost certain. For that reason, an effective dispute resolution mechanism is also needed.

We recommend that there be a coast-wide adjudication process or regional processes, and that they are binding on the parties.

Both the Washington State tribes and the Maori have attempted to develop principles for intertribal sharing. Principles that could be considered for B.C. First Nations include: the relative strength of aboriginal or treaty rights to the fishing area or stock; traditional access to the fish; contribution to conservation of the stock; access to alternative stocks and social factors including population and need.

The Canadian government would benefit from such a First Nations allocation process, and should provide adequate financial resources to address intertribal allocations.

RECOMMENDATION 4:

Canada immediately increase treaty settlement funds, or funds through other negotiating processes, to enable purchase or buy-back of licences and allow for the reallocation recommended above.

As figures printed elsewhere in this report attest, there is an imbalance in the present system with commercial, and in some cases recreational, interests holding a far greater share of fisheries resources than do aboriginal people. To correct this imbalance will require reallocation and that will not happen without increased funding.

To do nothing will almost certainly result in high costs for the government in the form of more court cases and lost investment opportunities. Also, doing nothing ensures that high poverty levels in many First Nation communities are not addressed, which from a social and economic justice perspective is not acceptable.

Affecting a reallocation of fisheries resources to improve First Nations' economic participation is relatively easy. This was achieved in the Nisga'a Final Agreement. It has also been successfully done through Pilot Sales Agreements as discussed elsewhere in this report. In both these cases, a call was put out for people interested in retiring their commercial fishing licences in exchange for purchase at fair market value. Once this is done, reallocation can be made based on the catch attributed to the licences transferred.

Funding for reallocation could flow through the Federal Treaty Negotiation Office, but transfers should be aimed at all First Nations, whether or not they are negotiating treaties.

RECOMMENDATION 5:

Canada immediately recognize in policy, and implement through negotiated agreements, the aboriginal right to manage fisheries.

Canada has been moving slowly in the direction of co-management with aboriginal peoples through initiatives such as the Aboriginal Fisheries Strategy. Another trend is that fisheries management responsibilities are increasingly being delegated to resource users both in terms of costs and delivery of services. The Panel's vision for the fishery involves further changes including a significant decentralization in decision-making and shared responsibility among First Nations, federal and provincial governments.

We have described examples of management processes involving First Nations only, First Nations and government only and multi-sectoral approaches. There are a number of working examples of these approaches including the Skeena Fisheries Commission (made up of Skeena First Nations), the Joint Fisheries Committee under the Nisga'a Final Agreement and the West Coast Vancouver Island Aquatic Management Board. We expect that these regional and local processes will evolve and new processes will emerge as treaty processes and new sharing arrangements are put in place.

It is not clear how these local and regional processes will relate to current and proposed DFO advisory processes. Among the ideas put forward for new management arrangements are regional management boards where a range of players participate including First Nations, DFO staff, provincial and regional government representatives, sport and commercial fishers, and public interest groups such as environmental organizations.

By providing more scope for direct First Nation involvement in fisheries management, tensions between all three levels of government can be reduced and, as spelled out in the *Sparrow* and *Delgamuukw* decisions, the legal rights and interests of aboriginal people can be affirmed.

This sharing of decision-making need not be viewed as increasing management costs. In fact, it may be more cost-effective. For one thing, most First Nation communities are ideally located near fisheries resources and well positioned to do many parts of the job. In many cases too they are already playing an important role in fisheries management through the application of local experience and Traditional Ecological Knowledge, or through various initiatives including watershed restoration, stock enhancement, stock assessment, and monitoring and enforcement efforts.

This sharing also holds the promise of reducing bureaucracy and reducing, although not replacing, the need for costly, time consuming and not always effective government-to-government consultation processes.

To reach the objective of effective and inclusive fisheries management First Nations and Canadian governments must ensure that the most effective and committed people are in place to co-manage stocks. People with the right cultural and educational skills and attitudes are essential.

Within a new management regime care must be taken to respect First Nation cultural values and practices. Also, a high priority must be placed on mitigating the effects of past damages to fish stocks, be they a result of stock reductions due to poor fisheries management decisions, or habitat losses due to various land-based activities. Turning around these losses is a priority for many First Nation communities and will require ongoing financial support from the federal and provincial governments, and industry.

One uncertainty is the degree of interest by some First Nations in fishery economic opportunities given other choices such as forestry, tourism, etc. available in the current treaty approach. Many First Nations have limited economic development opportunities other than fisheries. However, increasing the mandate in fisheries will not necessarily address the interests of all First Nations.

In closing, two other aspects of the future role of First Nations in fisheries management are worthy of mention. First, the federal and provincial governments should make a greater effort to award fisheries management contracts to qualified aboriginal people, as for example through the federal Procurement Policy. As First Nations people acquire management skills, more of them will find work. As they move into management jobs and positions of authority, conditions improve within their communities. And that means improved relations between their communities and other levels of government. Second, we recognize the importance of an incremental approach to First Nation involvement in management and that all changes may have to be staged. To implement this recommendation, Canada needs to develop and support processes that include First Nations in management decisions affecting their fisheries interests. This must include management decisions that occur at the international, provincial and local or watershed levels.

RECOMMENDATION 6:

Canada clearly articulate how it will provide fisheries resources for First Nations commercial benefit, in light of the uncertainty created by the *Kapp* decision and the loss of pilot sales.

As noted elsewhere in this report, Pilot Sales Agreements were a significant change in Canadian government policy toward First Nations and the aboriginal right to fish.

Such agreements, however, only benefited a few First Nations in British Columbia, and for them the benefits were inconsistent.

The program mainly involved transfers of fish to First Nations after commercial fishers had voluntarily chosen to sell their licences. This resulted in a transfer of equivalent allocations to Pilot Sales fisheries. Following *Kapp*, the Pilot Sales ended and the allocations associated with them are now benefiting commercial fishermen who were not the intended recipients.

The current state of affairs leaves many First Nations believing that there is no protection of commercial fishing rights outside of returning to court to prove Section 35 aboriginal rights in fisheries.

In the absence of Pilot Sales or some other mechanism, many First Nations, particularly those upriver, face extremely limited opportunities for commercial fisheries. This situation is clearly untenable and must be addressed. To do so properly and reliably, Canada must, in response to the abundant historical evidence by First Nations' title to the fisheries, negotiate interim

accommodation agreements that begin to address the economic component of aboriginal title.

RECOMMENDATION 7:

A moratorium be placed on the further introduction of individual property rights regimes such as Individual Fishing Quotas unless First Nation interests including allocations in those fisheries are first addressed.

Individual transferable quota regimes have been established with little or no consultation with First Nations and often against the wishes of First Nations. The Federal and Provincial governments have recognized that these changes have a negative effect on treaties by increasing settlement costs. Individual transferable quotas also have other effects, such as reducing employment, increasing the costs to individuals entering the fishery, and corporate concentration. For these reasons further introduction of these programs must stop until First Nation interests are accommodated.

APPENDIX A Attendees at Panel Hearings

KAMLOOPS, FEBRUARY 20, 2004

Matthew, Pat, Secwepemc Fisheries Commission
Michel, Ken, Soda Creek First Nation
Sampson, Fred, Siska Indian Band
Stirling, Barney, Nicola Tribal Association
Witzky, Greg, Adams Lake Band

PRINCE RUPERT, FEBRUARY 23, 2004

Beynon, William, Metlakatla
Bolton, Rod, Haisla
Gladstone, Curtis, Kitkatla
Hall, Ken, Haisla
Hill, Bob, Tsimshian Nation
Jones, Lawrence, Haida
McKay, Greg, Gitxaala
Miller, Ric
Ridley, Clyde, Hartley Bay
Shaw, Darrell, Kitkatla
Sterritt, Art, Gitgaat
Stokes, Debra, Haisla
Wesley, Gerald, Tsimshian Nation
White, Bill, Haida
York, Don, Haida Massett

SMITHERS, FEBRUARY 25, 2004

Hall, Peter, Gitxsan Watershed Authority
Jackson, Robert, Gitxsan
Jackson, Ron, Gitxsan
Joseph, Walter, Office of Wet'suwet'en
Kingston, Derek, Gitanyow
Lattie, Yvonne, Gitxsan (Wilps Gwininitxw)
Michell, Ralph, Gitxsan Treaty Office
Russell, Herb, Gitanyow
Sampare, Rod, Gitxsan Treaty Office
Simpson, Darlene
Simpson, George
Williams, Bryan, Gitanyow
Wilson, Ray, Gitxsan Treaty Office (Kispiox)

PRINCE GEORGE, FEBRUARY 27, 2004

Alec, Delores, Nazko Chief
Alec, William, Trout Lake
Alexis, Thomas, Tlazten Nation
Chantyman, Rachael, Nazko Band Treaty
Cremo, Bernice, Nazko (Treaty)
Cremo, Douglas, Nazko Band Treaty
Crocker, Laurell, Nazko Band Treaty
Frederick, Carl, Lheidli T'enneh
Frederick, Frank Sr., Lheidli T'enneh
French, Margo, Carrier Sekani Tribal Council
George, Marvin T., Lheidli T'enneh Treaty
Krehbiel, Rick, Lheidli T'enneh Treaty Office
Laurent, Jerry, Nazko Band Council
Malloway, Ken, BCAFC, Tzeachten
Meshne, Andrew, Williams Lake Indian Band
Michel, Anthony, Soda Creek First Nation
Morrison, Craig, BCAFC, Gitxsan
Murphy, Ron, Canoe Creek Band
Narcisse, Arnie, BCAFC Chair
Paul, Melvin, Canim Lake
Pierre, Harry, Carrier Sekani Tribal Council (Tribal Chief)
Thomas, Leonard, Nak'azdli
Tibbetts, Ryan, Burns Lake Band
Toth, Brian, Lake Babine / Carrier Sekani Tribal Council
Webb, Jim, Tlazten Nation

FORT RUPERT, MARCH 1, 2004

Ambers, Basil, Kwakiutl
Brotchie, Eliza, Kwakiutl
Bruce, Maxine, Kwakiutl
Chen, Chrissy, Kitsumkalum
Henderson, John P., Kwakiutl District Council Vice-Chair
Humchitt, Harry, Kwakiutl
Hunt, David, Kwakiutl Council
Hunt, George, Kwakiutl
Hunt, Larry Sr., Kwakiutl
Hunt, Stephen, Kwakiutl
Jacobson, Jonathan, Kwakiutl
Matilpi, Maxine, Kwakiutl Negotiator
Morris, Glen
Mountain, Robert,
Kwakiutl Territorial Fisheries Commission
Omhid, Hilda, Kwakiutl
Salverda, Irene, Student
Schmidt, David, Quatsino
Scow, Alfie, Kwakiutl
Twance, Gordon Jr.
Wadhams, James, Kwakiutl
Wilson, Albert, Kwakiutl
Wilson, James D., Kwakiutl District Council Chair
Wilson, Pat, Kwakiutl
Wilson, Charles, Kwakiutl

NANAIMO, MARCH 2 & 3, 2004

Alexander, Roy, Nuu-chah-nulth Tribal Council
Alphonse, Harvey, Cowichan Tribes Chief
Atleo, Cliff Jr., Nuu-chah-nulth Tribal Council
Atleo, Cliff Sr., Ahousaht
Atleo, Shawn, Nuu-chah-nulth Tribal Council Co-chair
Ayers, Cheri, Hul'qumi'num
Barltrop, Barb, Nanoose Councillor
Blaney, Bill, Homalco Council
Blaney, Fay, Homalco
Botterell, Rob, Cowichan Tribes
Chippeway, Rod, Heiltsuk
Christakos, Jim, Ditidaht/Pacheedaht
Corfield, Michelle, Ucluelet
Dennis, Robert, Huu-ay-aht Chief Councillor
Dick, Ralph, Cape Mudge Chief
Dunn, Helen, Pacheedaht
Edgar, Carl Jr., Ditidaht Council
Edgar, Phillip, Ditidaht
Elliott, John T., Cowichan
Gallic, Willard, Nuu-chah-nulth Tribal Council
Gesinghaus, Yvon, Te'mexw Treaty
Gladstone, Bill Sr., Heiltsuk SOK
Gray-Thorne, Joe, Ditidaht Council
Hackett, Florence, Homalco Council
Helin, Pat, Tsimshian
Joe, Jonathan, Cowichan
Johnson, Larry, Huu-ay-aht Council
Jones, Jeff, Pacheedaht Council
La Boucan, Guuduniia, Cowichan
Lamb, Judi, Ditidaht
Little, Archie, Nuu-chah-nulth Tribal Council
Manson, Craig, Snuneymuxw
McCarthy, Charles, Ucluelet
Moody, Reg, Heiltsuk
Morales, Robert, Hul'qumi'num Treaty
Ogilvie, Ruth
Olebar, Michael, Cowichan
Osborne, Josie, Nuu-chah-nulth Tribal Council
Shepert, Bill, Wet'suwet'en
Sieber, Fred, Ditidaht
Smith, Dan, Hamatla Treaty Society
Speck, Fred, Kwakiutl Territorial Fisheries Commission
Swanson, Jason, QFN
Tatoosh, Peter, Hupacasath First Nation
Tatoosh, Tom, Hupacasath First Nation
Taylor, Gordon, Ucluelet elder
Thomas, Jeff, Snuneymuxw Council
Thompson, Jack, Ditidaht Chief
Touchie, Jack, Ucluelet Council
Watts, Richard, Tseshaht
Williams, Barney Sr.
Williams, Charlie, Kwakiutl Territorial Fisheries Commission
Wylie, Florence, Nuu-chah-nulth Tribal Council

CHILLIWACK, MARCH 5, 2004

Antone, Les, Kwantlen Council
Coutlee, David, Nicola Tribal
Crey, Ernie, Cheam
Douglas, Sidney, Cheam Chief
Edwards, Tina, Nlhakapmx
Jacobs, Nikki, Tsawwassen
Jacobs, Tony, Tsawwassen
James, Peter, Katzie Chief
Jim, Ernie, Lilwat
John, Patricia, Chawathil elder
John, Ronald, Chawathil Chief
Kelly, Doug, Soowahlie Chief
Malloway, Ken, Yokweakwioose
Malloway, Tony, Tzeachten, FMB/Councillor
McIntyre, Ivan, Seabird Island
Michel, Ko'waintco, Nicola Tribal Chairperson
Narcisse, Arnie, BCAFC Chair
Narte, Mario, Skway First Nations
Pearson, Paul, Skidegate Council
Point, Jeffrey, Skowkale Council
Sampson, Fred M., Siska First Nations Chief
Stamp, Johnathan, Sto:lo
Thomas, Liz & Harvey, Seabird
Todd, Neil, Nicola Tribal
Victor, Ernie, Sto:lo
Williams, Allen, Sto:lo
Williams, Ron, Skwah
Wilson, Ross, Heiltsuk Nation, Chief Councillor

APPENDIX B Verbal Presentations at Panel Hearings

(no written submission received)

First Nations and/or Organizations which made verbal presentations:

PRESENTER	HEARING LOCATION AND DATE
Council of Haida Nation	Prince Rupert – February 23, 2004
Gitxsan Watershed Authority	Smithers – February 25, 2004
Homalco First Nation	Nanaimo – March 2, 2004
Kwakiutl District Council	Fort Rupert – March 1, 2004
Nazko First Nation	Prince George – February 27, 2004

Individuals who made verbal presentations:

PRESENTER	HEARING LOCATION AND DATE
Ambers, Basil	Fort Rupert – March 1, 2004
Hunt, Noreen	Fort Rupert – March 1, 2004
Jackson, Ron & Robert, Gitxsan	Smithers – February 25, 2004
Lattie, Yvonne, Gitxsan	Smithers – February 25, 2004
Miller, Ric	Prince Rupert – February 23, 2004
Simpson, Darlene and George	Smithers – February 25, 2004
Twance, Gordon Jr.	Fort Rupert – March 1, 2004
Wilson, Albert	Fort Rupert – March 1, 2004

APPENDIX C Written Submissions to the Panel

First Nations and/or Organizations:

1 Adams Lake Band
2 Ahousaht First Nation
3 BC Aboriginal Fisheries Commission
4 Carrier Sekani Tribal Council
5 Cheam First Nation
6 Cowichan Tribes
7 Ditidaht First Nation
8 Esquimalt First Nation
9 First Nations Youth Caucus
10 Fraser Basin Council
11 Gitanyow Fisheries Authority
12 Haisla Fisheries Commission
13 Hamatla Treaty Society
14 Heiltsuk Nation
15 Hul'qumi'num Treaty Group
16 Hupacasath First Nation
17 Huu-ay-aht First Nation
18 Kwakiutl Band Council
19 Kwakiutl Territorial Fisheries Commission
20 Kwantlen First Nation
21 Lheidli T'enneh Band
22 Musqueam Indian Band
23 Namgis First Nation
24 Nicola Tribal Association
25 Nuu-chah-nulth Tribal Council
26 Okanagan Nation Alliance
27 Pacheedaht First Nation
28 Secwepemc (Northern) te Quelmucw
29 Secwepemc Fisheries Commission
30 Sto:lo Nation
31 Tahltan Fisheries Program
32 Te'mexw Treaty Association
33 Tsawwassen First Nation
34 Tseshaht First Nation
35 Tsimshian Tribal Council
36 Uchucklesaht Tribe
37 Wet'suwet'en, Office of the
38 Wuikinuxv (Oweekeno) Fisheries Office

Individuals or those who presented or submitted background information:

39 Clifton, Heber – background materials submitted
40 Hall, Bob (Skowkale member) – background materials submitted
41 Watts, Hugh (Hupacasath member)

APPENDIX D Features of Agreements in Principle and Treaties as they Apply to Fisheries

SLIAMMON FIRST NATION

The Sliammon First Nation, consisting of more than 750 members, signed an AIP with Canada and B.C. on December 6, 2003. The AIP sets out that the Final Agreement will identify Sliammon's allocations of sockeye, chum, coho and pink salmon, which will vary annually, depending on fish abundance and conservation requirements. It notes that the potential annual average catch is estimated at 12,250 sockeye salmon, 4,125 chum salmon, 5,000 pink salmon, 130 chinook salmon and 260 coho salmon, for a total of 21,865 salmon. Surplus will be addressed on an annual basis. In addition to salmon allocations, the Final Agreement will set out allocations for some non-salmon species, including clams, groundfish, herring, herring spawn, prawns and sea urchins. The parties may discuss Sliammon access to shellfish areas and herring allocations that may fall outside the area set out in the AIP.

Sliammon will have the right to take the total allowable catch (TAC) of intertidal bivalves on the foreshore of Harwood Island and may apply for shellfish aquaculture tenures on that foreshore. Commercial fishing opportunities will be set out in a catch agreement. In the meantime, the parties will initiate a treaty-related measure respecting commercial and domestic fish catching and management, and chinook monitoring.

LHEIDLI T'ENNEH NATION

The Lheidli T'enneh Nation, consisting of over 300 members, signed an AIP with Canada and B.C. on July 26, 2003 in Prince George. In addition to self-governance provisions, it includes 4,027 hectares of land, $12.8 million and rights to wildlife, FSC fish, forest and other resources. The parties will enter into a catch agreement for Fraser River sockeye salmon, which will be negotiated outside the treaty and will specify an abundance based formula that would have resulted in an average of 7,500 sockeye per year if applied to a historical data set. The Lheidli T'enneh Nation has been implementing interim measures arrangements to help the parties evaluate commercial fishery opportunities, regional fisheries management options and in-river stock assessment projects. Another interim measures project is testing implementation of the Joint Fisheries Committee and Joint Technical Committee that will be provided for in the Final Agreement. A fund will be negotiated to support the First Nation's future participation in fisheries management.

MAA-NULTH FIRST NATIONS

The Maa-Nulth AIP is dated May 29, 2003. The five Maa-Nulth First Nations (Ka:'yu:'k't'h'/Che:k'tles7et'h', Ucluelet, Toquaht, Uchucklesaht and Huu-ay-aht, representing a population of approximately 1,934 people) will have domestic allocations for sockeye, chinook, coho and chum salmon, herring, halibut, some species of groundfish. Domestic allocations for Dungeness crab, prawns, bivalves, shellfish and tuna will be negotiated prior to finalizing the treaty.

The AIP provides for the Maa-Nulth First Nations and DFO to negotiate an agreement outside the treaty for commercial fishery opportunities. These negotiations will determine annual allocations of sockeye and chinook salmon, herring, halibut, sablefish and Dungeness crab. Aquaculture tenures may be negotiated and each Maa-Nulth First Nation may be awarded selective terminal salmon fishing opportunities at the discretion of the Minister. Commercial fishery opportunities will have the same priority as regular commercial fisheries in management decisions by the Minister.

TSAWWASSEN FIRST NATION

The Tsawwassen AIP was signed by the parties on March 15, 2004. The Tsawwassen First Nation, having a population of 328 members, will have the right to a domestic fishery of 12,000 Fraser River sockeye salmon, 2,000 chum salmon, 625 chinook and 500 coho per year. They will also have the right to establish a commercial fishery that catches up to 0.78% of the commercial catch of Fraser sockeye and pink salmon, and 3.27 % of Fraser River chum salmon. The Tsawwassen will receive $2 million to enable it to increase its commercial fishing capacity and to establish a fisheries fund. Details of the commercial fishery will be worked out in negotiations toward a Final Agreement.

NISGA'A FINAL AGREEMENT

The Nisga'a Final Agreement is currently the only modern day treaty in B.C. and provides an example of a modern day First Nation Fishery in the province. It is important to note that the Nisga'a Final Agreement was negotiated outside of the B.C. treaty process described earlier in this report.

In the Nisga'a Final Agreement, the Nisga'a retain title to 1,992 square km out of their original claim area of 20,000 square km and receive a cash component of $190 million, with an additional $11.5 million to purchase commercial fishing vessels and licences. The land includes 62 square km of former reserve lands. The total cost including treaty implementation, infrastructure and other commitments is quoted at $487.1 million in 1999 dollars, with the federal share being $255 million, according to Mary Hurley, The Nisga'a Final Agreement, Parliamentary Research Branch, Library of Parliament, PRB 99-2E, at 30.

Approximately 2,500 of the 5,500 Nisga'a live in the treaty area which they share with 100 non-aboriginal residents. The Nisga'a Final Agreement addresses the issue of uncertainty by exhaustively listing the section 35 rights of the Nisga'a peoples and modifying them into treaty rights. Any rights not set out in the treaty are 'released'.

The Nisga'a have three kinds of fisheries: domestic (food, social and ceremonial purposes, not authorized for sale), communal sale (communally operated by Nisga'a fisheries and all fish for commercial purposes is currently purchased or directly caught by Nisga'a fisheries), and individual sale (regulated by permit). Regarding management, the parties established a Joint Fisheries Management Committee (JFMC) to facilitate the implementation of the fisheries component of the treaty. The JFMC oversees all assessment, management and catch plans and provides recommendations to Minister(s). The Final Agreement also addresses Nisga'a law-making authority.

As set out in the Nisga'a 2002 annual report, eight hundred Nisga'a citizens with individual sale fishing permits shared nearly $400,000 in revenues and paid more than $160,000 to the Nisga'a Lisims Government. Five per cent (5%) of the catch is now value-added products, including premium quality, specially labeled Nisga'a wild sockeye salmon, which is processed through a joint venture with Jim Pattison's Canfisco Group. Nisga'a fisheries employed 100 people.

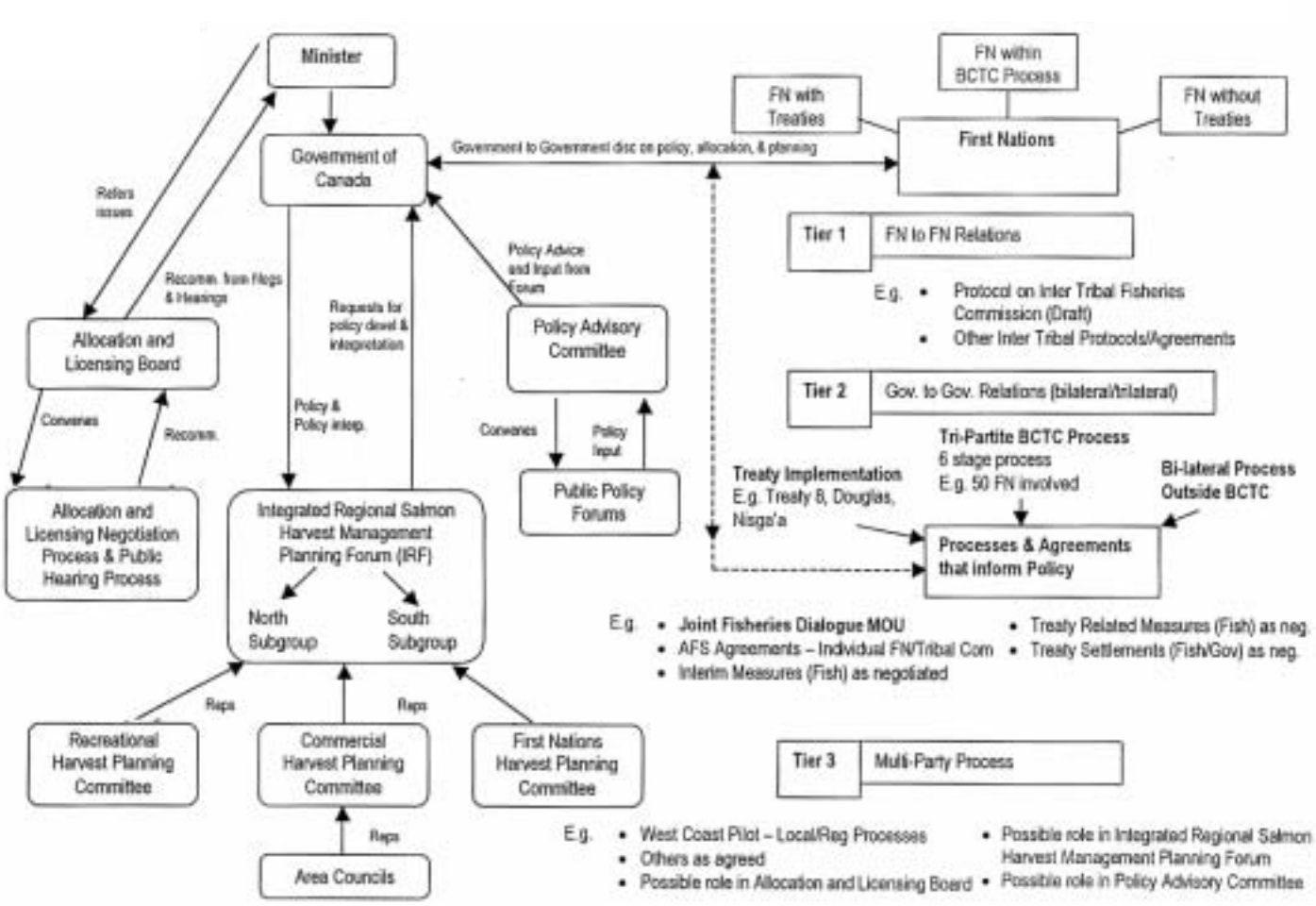
APPENDIX E Commercial Licences held by First Nations

CATEGORY	COMMUNAL	REDUCED FEE	NNFC	BAND HELD	TOTAL NON-TRANSFERABLE	FULL FEE	TOTAL NATIVE HELD	ALL ACTIVE LICENCES	% NON-TRANSFERABLE	% NATIVE HELD
SALMON										
Gillnet	76	164	254		494	42	536	1406	35%	38%
Seine	12	18	-		30	50	80	276	11%	29%
Troll	19	24	-		43	7	50	539	8%	9%
All Gears	107	206	254		567	99	666	2221	26%	30%
ROE HERRING										
Gillnet	27	325	-	-	352	2	354	1256	28%	28%
Seine	1	51	-	-	52	11	63	252	21%	25%
Both Gears	28	376	-	-	404	13	417	1508	27%	28%
Spawn-on-Kelp	11	-	-	15	26	10	36	46	57%	78%
GROUNDFISH										
Halibut	26	-	-	-	26	27	53	453	6%	12%
Sablefish	1	-	-	-	1	1	2	48	2%	4%
Groundfish Trawl		-	-	-	0	5	5	142	0%	4%
Rockfish (Z-N)	14	-	-	-	14	5	19	262	5%	7%
Sardine	25	-	-	-	25	4	29	50	50%	58%
Eulachon		-	-	-	0	2	2	16	0%	13%
C-Category Licence	8	-	-	-	8	12	20	541	1%	4%
SHELLFISH										
Crab	9	-	-	-	9	2	11	222	4%	5%
Prawn	5	-	-	-	5	4	9	252	2%	4%
Geoduck/Horse Clam	-	-	-	-	0	1	1	55	0%	2%
Red Urchin	6	-	-	7	13	1	14	110	12%	13%
Green Urchin	-	-	-	-	0	-	0	49	0%	0%
Sea Cucumber	-	-	-	5	5	5	10	85	6%	12%
Shrimp Trawl	11	-	-	-	11	4	15	246	4%	6%
Krill by Trawl	1	-	-	-	1	1	2	19	5%	11%
Clam by Hand	648	-	-	-	648	-	648	1146	57%	57%
Heiltsuk Clam	59	-	-	-	59	-	59	50	100%	100%
Haida Razor Clam	94-269	-	-	-	94-269	-	94-269	100-275	94-98%	94-98%
Total not incl. clams	387	1164	508	27	2086	308	2394	10054		24%

NOTES:

1. Source of data is James (2003).
2. Does not include Native-operated Licences. 54 salmon seine licences were reported as Native-operated.
3. Nine inactive herring gillnet licences are not included since they are required to be retired for a spawn-on-kelp licence entitlement.
4. Communal clam licences include 564 communal non-transferrable and 84 aboriginal non-transferable licences

APPENDIX F An Integrated Salmon Fishery Planning System



Source: Institute of Dispute Resolution (2001)

APPENDIX G Selected References

Boxberger, Daniel L. *To Fish in Common: The Ethnohistory of Lummi Indian Salmon Fishing*. University of Washington Press, 212 p., 1989.

British Columbia Claims Task Force, *The Report of the British Columbia Claims Task Force* (June 28, 1991).

Department of Fisheries and Oceans. 2000. A Framework for Improved Decision-Making in the Pacific Salmon Fishery, Discussion Paper. A New Direction: The Sixth in a Series of Papers from Fisheries and Oceans Canada, 21 p., June 2000.

Department of Fisheries and Oceans. Wild Salmon Policy Discussion Paper. A New Direction: the Fifth in a Series of Papers from Fisheries and Oceans Canada, 30 p., March 2000.

Department of Fisheries and Oceans. Pacific Fisheries Adjustment and Restructuring Program: A Plan to Revitalize Canada's Pacific Fisheries, Progress Report for Year 3, July 2000 to July 2001. Communication Branch, Fisheries and Oceans Canada, 20 p., 2001.

Gardner, Julia. Making Sense of the Salmon Aquaculture Debate. Analysis of issues related to netcage salmon farming and wild salmon in British Columbia. (Report prepared for Pacific Fisheries Resource Conservation Council, January 2003).

Gardner, Julia and David L. Peterson. 2003. Making Sense of the Aquaculture Debate: Analysis of issues related to netcage salmon farming and wild salmon in British Columbia. 152 p.

Gardner Pinfold Consulting Economists Limited. 1994. *An Evaluation of the Pilot Sales Arrangement of Aboriginal Fisheries Strategy (AFS)*. Prepared for the Fisheries and Oceans Canada, April 1994. 60 p. + App.

Gislason, G.S. & Associates. British Columbia Seafood Sector and Tidal Water Recreational Fishing: A Strengths, Weaknesses, Opportunities, and Threats Assessment. (Report prepared for B.C. Ministry of Agriculture, Food and Fisheries, Victoria, B.C., 234 p. + App., February 2004)

Glavin, Terry. The Conservation of Marine Biological Diversity and Species Abundance on Canada's West Coast: Institutional Impediments. Groundfish: A Case Study. (Prepared for Sierra Club of British Columbia, 24 p., March 2001).

Gottesfeld, A.S., K.A. Rabnett and P.E. Hall. Conserving Skeena Fish Populations and Their Habitat: Skeena State I Watershed-based Fish Sustainability Plan. (Skeena Fisheries Commission, Box 229, Hazelton, B.C., 281 p.).

Harris, Douglas C. *Fish, Law and Colonialism: The Legal Capture of Salmon in British Columbia.* (University of Toronto Press, Toronto, Canada., 306 p., 2001).

Institute for Dispute Resolution. 2001. Independent Review of Improved Decision Making: for Fisheries and Oceans Canada. 38 p., March 2001.

James, Michelle. *Native Participation in British Columbia Commercial Fisheries – 2003.* (Report prepared for Ministry of Agriculture, Food & Fisheries by Teakerne Resource Consultants, 29 p., 2003).

James, M.D. Historic and Present Native Participation in Pacific Coast Commercial Fisheries. Canadian Manuscript Report of Fisheries and Aquatic Sciences 1786.

Karlson, Keith Thor. A Sto:lo Coast Salish Historical Atlas. (Douglas & McIntyre, Vancouver and University of Washington Press, Seattle, 208 p., 2001).

Marshall, Daniel P.. Those Who Fell From the Sky: A History of the Cowichan People. (Cultural and Education Centre, Cowichan Tribes. 187+ p., 1999).

McGoodwin, James R. Crisis in the World's Fisheries: People, Problems, and Policies. Stanford University Press, California, 235 p., 1990.

Newell, Dianne. Tangled Webs of History: Indians and the Law in Canada's Pacific Coast Fisheries. (University of Toronto Press, Toronto, 1993).

Northern Economics Inc. An Assessment of the Socioeconomic Impacts of the Western Alaska Community Development Quota Program. Report prepared for Alaska Department of Community and Economic Development Division of Community and Business Development, November 2002.

Ocean Studies Board. Sharing the Fish: Toward a National Policy on Individual Fishing Quotas. Committee to Review Individual Fishing Quotas, Ocean Studies Boards, Commission on Geosciences, Environment and Resources, National Research Council, 422 p., 1999.

Pacific Fisheries Resource Conservation Council. *Annual Report 2001-2002.* (Including a status report on southern B.C. and the Okanagan River salmon, 114 p., 2002).

Pacific Fisheries Resource Conservation Council. *Annual Report 2001-2002.* (Including summary of Pacific salmon in southern B.C. and the Okanagan River, Pacific Fisheries Resource Conservation Council, 114 p., 2002).

Pacific Fisheries Management Inc. Future Direction of the Commercial Groundfish Fisheries in British Columbia: Discussion Paper. Prepared for B.C. Ministry of Agriculture, Fisheries and Food, 22 p., June 2003).

Pearse, Peter H. Turning the Tide: A New Policy for Canada's Pacific Fisheries. (Minister of Supply and Services, Canada., 292 p., 1982).

Pinkerton, Evelyn. *The contribution of watershed-based multi-party co-management agreements to dispute resolution: the Skeena Watershed Committee* (Environments Journal, v.23(2) 1996, pp. 55-68).

Price Waterhouse. *Economic Impacts of Native Participation in the British Columbia Fishing Industry.* (Report prepared for the Native Fishing Association, 22 p. + App., July 1989).

Riddell, Dr. Brian. *Pacific Salmon Resources in Central and North Coast British Columbia* (Pacific Fisheries Resource Conservation Council, Vancouver, BC, pp. 37-39, Feb. 2004).

Robinson, Cathy. *Working Towards Regional Agreements: Recent Developments in Co-operative Resource Management in Canada's British Columbia* (Australian Geographical Studies, July 2001, 39(2): pp. 183-197).

Scow, Peter. *Analysis of Impacts on Federal Government Commercial Fisheries Licencing Policy and Regulations on Indian Fishing Communities and Proposals for Programs to Redress Adverse Impacts.* (Report prepared for the Native Brotherhood of British Columbia, 126 p., May 1987).

2000 National Survey of Recreational Anglers. Available online at: http://www.dfo-mpo.gc.ca/communic/ statistics/recreational/ canada/2000/Summary/nonresident_e.htm

Front cover photo:	Ian McAllister
Back cover photo:	Mark Hobson
Design & production:	Eye Design Inc.
Printed in Canada:	Budget Printing