



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

**A NEW DIRECTION**

**FOR**

**CANADA'S PACIFIC SALMON FISHERIES**

**OCTOBER 1998**

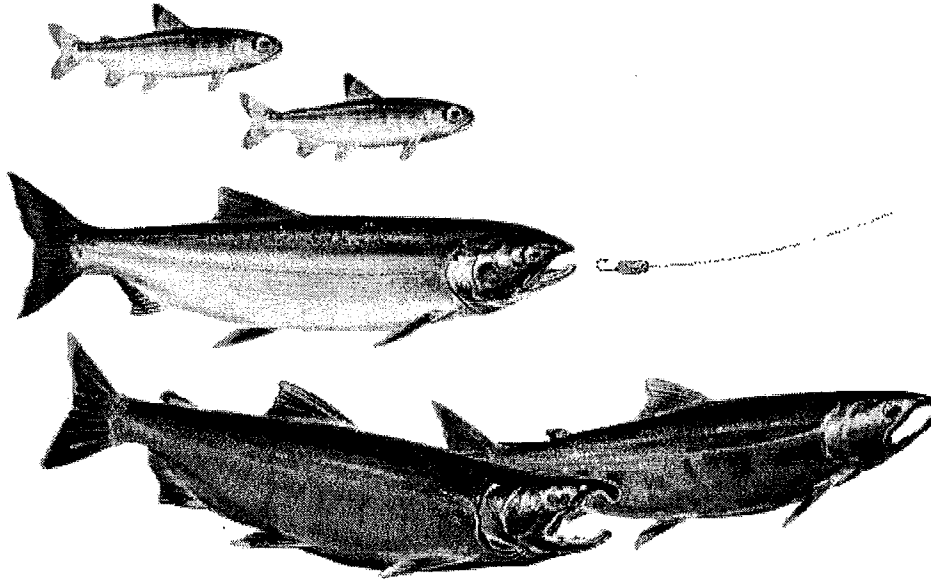
**Canada**



## 1. INTRODUCTION

*"We can no longer accept the status quo or continue to manage salmon from crisis to crisis. For the future of fish and fishermen, we must get ahead of the curve, and shift to a risk averse, conservation-based fishery."*

*The Honourable David Anderson  
Minister of Fisheries and Oceans  
Vancouver, BC , June 19, 1998*



In British Columbia, salmon serve as food for First Nations and are a source of their cultural identity; they provide jobs and income for Canadians, businesses and coastal communities; they provide recreation and enhance our quality of life; and serve as a measure of our environmental health and well being. Pacific salmon help define who we are and where we live. They are our heritage and our responsibility; they must also be our legacy.

The five species of Pacific salmon which live along side us in BC are facing increasingly difficult challenges. A number of stocks are at risk. Rebuilding efforts are constrained by low ocean productivity. Habitat damage continues to erode the productive potential of the resource. Non-selective harvesting practices in mixed stock fisheries have jeopardized the future of weaker stocks. The economic viability of the commercial salmon industry is declining due to excessive participation, lower abundance and declining prices in the world market. Allocation conflict is a continuous feature of the fishery and competition for the resource threatens conservation.

It is clear that fundamental changes are required to meet these challenges and protect this valuable, public resource. A new direction for Canada's Pacific salmon fisheries has been set – a direction that will secure our legacy for future generations. Some of the principles outlined below are concepts that have been informing federal fisheries management for some time and have now been integrated into the new direction for the salmon fisheries.

The purpose of this document is to describe the broad policy principles that will guide our new approach to the Pacific salmon fisheries. These principles will provide the framework for the articulation and implementation of operational policies. These operational policies will cover the full range of activities involved in the management of the salmon resource, including setting spawner escapement goals, encouraging selective fishing, allocating harvestable surpluses and ensuring compliance with the regulations.

Section 2 of this report provides an overview of the environmental uncertainty we are facing, in particular recent changes in ocean conditions affecting salmon productivity. Section 3 describes the context for embarking upon a new approach to managing Pacific salmon, including the legislative basis for change, the imperative of protecting biological diversity and the emerging role of community groups in the decision making process. In Section 4, a series of principles are presented under three broad headings – conservation, sustainable use and improved decision making. Section 5 identifies the need to establish a series of operational policies consistent with the principles found in the previous section and outlines the next steps in that process.

This paper is part of a process of clarifying the policy direction for Pacific salmon. The process involves the establishment of clear principles, which are found in this paper, and the subsequent articulation of operational policies, which will be developed with further stakeholder input. To illustrate the distinction, Principle 1 reads “Conservation of Pacific salmon stocks is the primary objective and will take precedence in managing the resource”. While this principle is not negotiable, there are a number of issues concerning how to achieve it and the respective roles of various groups. For example, the potential to enhance the roles of First Nations and stakeholders as well as the need to establish specific spawning escapement objectives requires additional work. Similarly, with respect to sustainable use there are questions concerning salmon allocation, selective fishing and licence holding issues that require further discussion.

## 2. ENVIRONMENTAL UNCERTAINTY

Scientists advise that we may be facing a regime shift in the ocean - a change in ocean conditions resulting in lower productivity. Recent research indicates there are connections between long-term shifts in ocean climate conditions and salmon abundance across the Pacific Rim. The late 1980s and early 1990s were periods of record high harvests; as ocean climate conditions shift in the future, it is unlikely that these high harvests can continue. Warming of major river systems such as the Fraser and Skeena due to climate change could also reduce fish production, particularly as some important tributaries now reach temperatures which are stressful or near lethal to fish.

While a number of salmon stocks are healthy, some are extremely depressed. Under current ocean survival conditions, for example, the abundance of Upper Skeena and Thompson River coho stocks will continue to decline even without a fishery, and some individual spawning populations are at high risk of biological extinction. Concerns for these stocks will affect fishing plans for at least the next six years (two coho generations). In addition, there are concerns about the status of some chinook salmon stocks which are strongly influenced by ocean conditions. Fisheries management plans in coming years will have to address these conservation concerns.

For the salmon fishery on the West Coast to be sustainable, a sufficient number of eggs must survive to replace the spawning adults that produced those eggs. Survival from egg to spawning adult depends on the productivity of freshwater and ocean salmon habitats, natural mortality and harvests by the fisheries.

Changes in the ocean and freshwater environment and greatly increased uncertainty make it increasingly difficult to predict future returns of salmon with confidence. However, lower returns are anticipated if current conditions persist for the next few years. Thus, a conservation-based, precautionary approach to fisheries management, as well as a re-evaluation of mixed stock fisheries, is mandatory in the face of increased uncertainty regarding changing ocean conditions and resultant impacts on salmon stocks.

### **3. A FRAMEWORK FOR CHANGE**

#### Federal Legislation

The Fisheries Act provides the legislative authority for the management and regulation of the fishery. It assigns powers to regulate access, control conditions of harvesting and enforce regulations. It is also one of the strongest environmental laws in Canada. The Fisheries Act gives government the authority to stop projects and activities that could “alter, disrupt or destroy” fish habitat.

The future direction of salmon management will be implemented in the context of the new Oceans Act. The Canada Oceans Act is founded on the principles of sustainable development and integrated resource management. By establishing the Canada Oceans Act, the federal government has reaffirmed its commitment to oceans and marine resource management. The Act provides a comprehensive legal framework to foster stewardship of ocean resources. Further, it sets the stage for the development and implementation of an Oceans Management Strategy.

The Oceans Strategy is focussed on unifying the efforts of all federal, provincial and territorial agencies as well as local jurisdictions. The Strategy integrates all diverse sector programs related to the oceans including fish management, science, enforcement, habitat protection, salmonid enhancement, aquaculture, recreational and commercial waterways safety and environmental management.

#### Biological Diversity

As a signatory to the international Convention on Biological Diversity, Canada is committed to the sustainable use of biological resources and minimizing adverse impacts on biological diversity. Biological diversity means the variability among living organisms from all sources, including the terrestrial and marine ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems.

#### Community Involvement

The potential exists for greater community involvement in fisheries resource and oceans activities. Many communities are already involved in habitat stewardship. The federal government is committed to working with communities to enhance their input into the decision making process.

## 4. NEW DIRECTION

The new direction for Canada's Pacific Salmon fisheries has three key components: conservation, sustainable use and improved decision making. A brief description of each of these components follows. This information is intended to set the stage for a discussion with stakeholders on the operational policies associated with management of the salmon resource.

### 4.1 CONSERVATION

*"At the beginning of the 1990s, about sixty-nine percent of the world's conventional species were fully explored, overexploited, depleted or in the process of rebuilding as a result of depletion. This situation is globally non-sustainable and major ecological and economic damage is already visible. The satisfaction of the demand for food from the sea in the next two decades requires progress in both fisheries conservation and management and in aquaculture."*

*The State of World Fisheries and Aquaculture.  
Food and Agriculture Organization of the United Nations, Rome, 1995, p. 16.*

The need for a new conservation ethic for our salmon resources and their habitat is widely accepted. Fish and habitat must be protected from irreversible depletion and the diversity of species conserved for future generations. Therefore, sound scientific advice will continue to guide fisheries and habitat management decisions.

It is important to recognize that salmon management is also an international issue due to the highly migratory nature of the resource. To achieve the resource conservation and sustainable use objectives outlined in this paper, cooperative international management will be required.

#### **Principle 1**

**Conservation of Pacific salmon stocks is the primary objective and will take precedence in managing the resource.**

The new conservation ethic involves ensuring that adequate numbers of salmon spawn each year, that successful reproduction takes place and that genetic diversity is maintained. Effective conservation of salmon also requires that harvest management be integrated with production management on a watershed basis. Habitat and enhancement planning should complement harvest management and ensure escapement goals are consistent with the productive capacity of the habitat.

Ultimately, conservation goals must be established at levels that optimize productive capacity and benefits to the people of Canada. To accomplish these goals integrated watershed plans will be prepared in consultation with public stakeholders.

## **Principle 2**

**A precautionary approach to fisheries management will continue to be adopted.**

Given uncertainties in predicting fish population levels and survival levels, a precautionary, risk averse approach to fisheries management is essential. Salmon populations need to be maintained at sufficient levels of abundance to provide a buffer when marine survival and other conditions threaten the spawning success of the next generation. Therefore, operational guidelines for implementing the precautionary approach will be developed.

## **Principle 3**

**Continue to work toward a net gain in productive capacity for salmon habitat in British Columbia.**

Salmon depend on the unique characteristics of the freshwater and saltwater habitat in which they live and spawn. Specific habitat conservation and development goals will be achieved through the protection, management and restoration of fish habitat. Strategic, short-term enhancement of threatened stocks will be used to assist them to survive and accelerate rebuilding. Our goal is to ensure that natural salmon habitat is maintained to support naturally reproducing populations of salmon.

Development and enhancement of cooperative arrangements with other levels of government and the public, necessary to achieve these goals, is a high priority. In particular, it is important that the Governments of Canada and British Columbia work together to maximize benefits for salmon habitat. The Province has the regulatory authority over a number of activities affecting marine and freshwater habitat.

Consistent with this new conservation framework, the Minister of Fisheries and Oceans has established the Pacific Fisheries Resource Conservation Council (PFRCC). The PFRCC is an independent body reporting annually on the status of BC's salmon stocks and their habitat. In creating the PFRCC, the importance of independent advice, as well as First Nations and public participation in the advisory process, is formally recognized.

## **Principle 4**

### **An ecological approach will guide fisheries and oceans management in the future.**

*“The salmon runs in British Columbia’s coastal rivers are the lifeblood of BC’s temperate rain forest. Wildlife such as grizzly bears, wolves and bald eagles eat their fill of returning salmon; the spent carcasses provide essential nutrients to the stream environment and literally fertilize the valley forests. In return, the new eggs thrive in the clean, cold water that only intact forest watersheds can provide.”*

*Turning the Tide on the Salmon Crisis, Salmon Report No. 1  
The Sierra Club of British Columbia, Summer 1998*

The definition and practical implementation of an ecological approach to fisheries and oceans management is complex. Work has been initiated to clarify its application. However, it is clear that an ecosystem approach involves understanding and providing for the complex interactions between the different species and requires a move away from the current single species management. The transition to an ecological approach to fisheries and oceans management will require a phased, step-wise approach, building on knowledge as it becomes available.

Ecological integrity is defined as a condition where the structure and function of an ecosystem are unimpaired by stresses induced by human activity and are likely to persist. It is recognized that, like the net gain in the productive capacity of salmon habitat, this overall objective needs to be looked at on a broad level and the operational applications fully discussed.

Marine Protected Areas (MPAs) are being established as a practical contribution to ecosystem management. For example, potential benefits of MPAs include contributing to the protection of the structure, function and integrity of ecosystems and encouraging expansion of our knowledge and understanding of marine systems.



## 4.2 SUSTAINABLE USE

Our primary objective is to pass on a robust, healthy and abundant salmon resource for the enjoyment of future generations. We will support a fishery by First Nations that is able to meet food requirements, and provides social, economic and cultural fulfillment. We will support recreational fishing opportunities that are diverse, stable and contribute to quality of life. We will support an economically and environmentally sustainable, self-reliant industry that provides participants with a secure opportunity, and is able to provide a positive contribution to their communities and the Canadian economy.

The salmon fisheries of the future will be different from those of today. The federal government recognizes that people will be affected and that there is a need for adjustment assistance as the salmon fisheries undergo a period of change in support of resource conservation and sustainability. The Government of Canada will continue to assist those individuals and communities affected through the period of transition.

### **Principle 5**

**The long term productivity of the resource will not be compromised because of short term factors or considerations – tradeoffs between current harvest benefits and long term stock well-being will be resolved in favour of the long term.**

In order to realize social and economic benefits from the Pacific salmon, a focus on the long term sustainability of the resource, based on the best available scientific advice, is essential. The Department will not compromise the long term productivity of the resource in situations where uncertainty about escapement requirements exists. This is a key component of the new direction for the salmon fisheries. Long term sustainability of the salmon resource will enable fish to be available for harvest from year to year by First Nations, recreational and commercial users while satisfying the needs of present and future generations of Canadians.

### **Principle 6**

**All sectors – First Nations, recreational and commercial – will use selective methods to harvest salmon.**

Historically, salmon have been harvested in mixed-stock fisheries, where different stocks and species intermingle. Given that various stocks and species have different levels of productivity, it would be desirable to harvest each separately (e.g., at a higher rate for the more productive stocks/species and at a lower rate for the less productive stocks/species). Strong and weak salmon stocks are often harvested together, so that some stocks may be under-harvested (resulting in surplus escapement) or over-harvested (resulting in stock decline).

For situations where selective harvesting alone will not address mixed stock fishing concerns (e.g., a weaker sockeye stock is harvested with a stronger sockeye stock), other management measures, such as restricting fishing area and time, will continue to be applied. In particular, fishing opportunities in outside areas may have to be restricted and/or moved to ensure conservation requirements are met.

A key objective of sustainable use is to have all sectors use selective fishing practices to harvest strong stocks while preserving and protecting weaker stocks of salmon. Specifically, selective fishing means having the ability to avoid non-target species and stocks or, if encountered, the ability to release non-target species and stocks live and unharmed. This will require modifications to existing gear and fishing operations and may require the introduction of alternative fishing gear and technology.

Many individuals who are currently involved in the fishery are uncertain about how the move to selective fishing will affect them. For example, those involved in the commercial fishery who have traditionally used gillnet, seine and troll gear, ask if they have a future in the fishery. A particular concern is the possibility of having salmon allocated to new users who employ selective fishing methods.

It is important to stress that the objective is to have all sectors – First Nations, recreational and commercial – use selective methods to harvest salmon. Achieving this objective involves encouraging existing participants in the fisheries to adopt selective harvesting practices. The intention is not to establish a new selective fishing user group separate from the current licence holders.

There are several critical steps associated with encouraging existing participants to adopt selective fishing practices. First, some financial support will be provided to identify gear improvement, gear development, and changes to fishing patterns that have the potential to improve the selectivity of our fisheries. Second, allocations will be provided from within the relevant shares (e.g., gillnet, seine and troll) in order to encourage more selective fishing. Third, it is imperative that any new selective fishing technique be carefully assessed and implemented with conservation considerations determining the decision to proceed. New approaches or methods must be consistent with conservation objectives.

### **Principle 7**

**First Nations requirements for food, social and ceremonial purposes will continue to have first priority after conservation requirements.**

The salmon resource will continue to be a source of food and cultural fulfillment for First Nations in British Columbia and the Yukon. These requirements for food, social and ceremonial purposes are constitutionally protected in Section 35 of the Constitution Act.

### **Principle 8**

**Whenever possible, the recreational fishery will be provided with more reliable and stable fishing opportunities.**

Recreational fishing occupies a special place in the hearts of the many Canadians and tourists who fish the rivers and coastal waters of British Columbia. Supporting and sustaining vibrant BC recreational salmon fisheries is a key part of the new direction of salmon management. Recreational anglers are most concerned with protecting fishing time and the opportunity to fish. In the future, anglers will be provided with more reliable and stable fishing opportunities whenever possible, after conservation goals and First Nations requirements for food, social and ceremonial purposes.

## Principle 9

**The commercial fishery will be a more diversified (less dependent on salmon) and economically viable sector, better able to withstand fluctuations in the cycles of the resource and the market.**

*"The need for reduction in the size of the salmon fishing fleet is beyond dispute."  
Coping With the Coho Crisis, Parzival Copes, April 1998*

Under the new direction of salmon management, the commercial salmon sector will have fewer participants, but will be more self-reliant. Investments will be made to help diversify the fishing fleet into other species, thereby reducing dependence on the salmon resource. Diversification will be based on the precautionary approach for all harvested species.

*"The industry as we know it today will not survive unless fundamental change is embraced and implemented."*

*Fishing For Money: Challenges and Opportunities in the BC Salmon Fishery  
British Columbia Job Protection Commission Report, June 10, 1998*

The current annual world supply of salmon, both wild and farmed, is three to four times the world supply of the late 1970s. Most of this increase can be attributed to the tremendous growth in farmed production. BC's share of world salmon production today is less than half of what it was in the early 1980s. BC wild salmon has lost its place as the premier salmon in world markets – it has been replaced by farmed salmon from Norway, Chile, BC and elsewhere. This has significantly impacted the economic viability of the BC commercial salmon industry.

Current fisheries management often results in unconstructive competition between different sectors and between individual fishermen for access to the resource. Salmon management will now focus on reducing such conflicts over access to the resource and possibly creating new cooperative institutional arrangements for catch sharing (a possible example could be the introduction of an arms-length allocation board).

*"To put it bluntly, we spend more time doing this sort of thing, doing protests and fighting for the right to fish, than we actually do fishing."*

*Bob Rezansoff, commercial seine fisherman  
The Vancouver Sun, September 16, 1992*

In the future there will be an explicit allocation framework. Allocation policies will provide more certainty regarding sharing arrangements while balancing the conservation needs of the resource, the constitutional rights of First Nations and the needs of both commercial and recreational harvesters.

### **4.3 IMPROVED DECISION MAKING**

Governments, First Nations, commercial fishermen, recreational anglers and the Canadian public have valid and diverse interests in the resource which must be treated fairly, in the spirit of cooperation and mutual respect.

#### **Principle 10**

**Clear, objective and relevant information on major issues requiring decisions will be provided to the public with sufficient time and opportunity for review, comment and feedback. Periodic review of progress and achievements will be initiated to facilitate accountability for the sound management of the salmon resource and its habitat.**

The environment in which stakeholders are involved in fisheries activities has changed over time; however, the institutional structure used to solicit stakeholder input has not kept pace and is outdated. While the Department currently solicits advice from the various stakeholder groups, there is a need for new mechanisms to better involve all stakeholders in the decision-making process. Increased public involvement in planning and management is essential to ensure sound decision making and to build public understanding and support for necessary management actions. The consultative process leading to the current management measures to protect the weaker coho stocks illustrates the benefits from increased public involvement, understanding and support.

#### **Principle 11**

**Government and stakeholders will together be responsible and accountable for sustainable fisheries.**

Under the new direction for the salmon fisheries, resource managers and stakeholders will share joint responsibility for sustainable fisheries including management costs, decisions, and accountability. The future salmon management regime will be based on partnerships with clients, governments and other parties.

These partnerships will include specific rights and roles, as well as accountability for well defined responsibilities and commitments. Stakeholders will be given more say in the decisions that affect their fishery, including development of management plans, increased control over expenditures associated with implementing the plan and greater security of access to the resource. In turn, stakeholders will also be held accountable for such decisions.

### **Principle 12**

**Enhanced community, regional and sector wide input to decision making will be pursued through a structured management and advisory board system.**

In the future, many of the decisions related to fisheries resources and their habitat could be made through a series of regional boards. These boards could cover a geographic area containing one or more watersheds. The scope of these boards is intended to cover a variety of issues.

The regional boards could support many activities including, but not limited to, watershed production, integrated coastal zone planning, fishery enforcement and compliance, and habitat protection, enhancement and restoration. Many communities are already actively involved in stream and habitat restoration and stewardship; however, there is enormous potential for local groups to assume an even greater role in fisheries resource and oceans activities.

## **5. NEXT STEPS**

The federal government recognizes that the salmon fisheries of the future will be very different from those of today and that a number of people will be affected by such change. Therefore, the federal government is making a new investment of \$400 million to increase efforts in protecting and rebuilding salmon habitat; restructure the commercial fishing industry by moving to selective harvesting, diversifying fishing income, and further reducing the fleet; and, assisting people and communities adapt to the changing fishery.

In addition to initiatives by Fisheries and Oceans Canada, programs from Human Resources Development Canada will assist individuals from all sectors – First Nations, commercial and recreational. Western Economic Diversification Canada will provide economic development support in communities affected by restructuring. Further support to First Nations will be provided through programs from Indian Affairs and Northern Development Canada.

This document sets out the broad policy direction associated with a new approach to the Pacific salmon fisheries. Based on this direction, a detailed set of operational policies for the management of the salmon resource will be developed. Consultations with the public, communities and stakeholders will now begin. The Government of British Columbia will be included in this process. These policies will cover the full range of activities involved in the management of the resource, including salmon allocation, selective fishing, and a wild fish policy.

Further details of operational policies on salmon allocation are required. A discussion paper based on this framework and setting out operating principles will be available in November.