



THE WILD SALMON POLICY DISCUSSION PAPER



SOME DEFINITIONS

Wild salmon:

produced by natural spawning in fish habitat from parents that were spawned and reared in fish habitat.

Biodiversity:

the variability among living organisms and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems.

Salmon enhancement:

using hatcheries, spawning channels, lake fertilization or habitat restoration to increase the survival of salmon at some stage of its life.

Extirpation:

the disappearance of a population of a species from a given area.



WHAT IS THE WILD SALMON POLICY?

The Wild Salmon Policy Discussion Paper is a guideline for conserving the long-term viability of Pacific salmon populations and their natural habitats. The discussion paper applies to all wild Pacific salmon, including those mixed with cultivated or enhanced populations that are able to reproduce in natural surroundings. The Wild Salmon Policy is one of a series of policy initiatives from Fisheries and Oceans Canada that build on *A New Direction for Canada's Pacific Salmon Fisheries* (October 1998) to reinforce a conservation-based approach to the management of Pacific fisheries.

Wild Pacific salmon are affected by fisheries, land development, environmental variation, climate change and other factors. With so many unpredictable factors and demands on the resource, decisions about fishing, habitat development and salmon cultivation must be made carefully to ensure sustainable social and economic benefits. The Wild Salmon Policy provides explicit guidelines to ensure that these decisions conserve the genetic diversity of wild salmon and to protect their habitat from irreversible damage.

Fisheries and Oceans Canada are consulting with interested parties

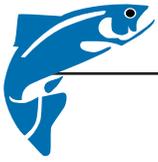
to discuss the principles of the Wild Salmon Policy Discussion Paper and to explore the implications for fisheries and habitat management. The challenge is to ensure that the policy is an integral part of the *New Direction*. The discussions also need to consider how the Wild Salmon Policy can help to shape a Salmonid Enhancement Program that remains relevant and effective for the future.

PART OF A GLOBAL CONSERVATION ETHIC

The Wild Salmon Policy is consistent with a new global conservation ethic that has grown out of a recognition that over-exploitation and habitat loss threaten many of the world's fisheries.

- The United Nations (UN) *Convention on Biological Diversity* was signed in 1992 by the Government of Canada and other nations to promote the conservation and sustainable use of biological resources. It requires governments to promote the protection of ecosystems, natural habitats, and the maintenance of viable populations of species in natural surroundings.
- Canada played a key role in the development of the *Code of Conduct for Responsible Fisheries*





proposed by the Food and Agriculture Organization (FAO) of the UN in 1995. The Canadian fishing industry is also committed to achieving sustainable marine and freshwater fisheries and has developed its own *Code of Conduct for Responsible Fishing Operations* as an essential step towards this objective. These non-binding agreements encourage responsible fishing practices and will contribute to the conservation of fish stocks and their aquatic environments.

- Fisheries and Oceans is applying the precautionary approach, a concept enshrined in the Rio Declaration of the UN Conference on Environment and Development, to implement these conventions and agreements. The UN advises that “management according to the precautionary approach exercises prudent foresight to avoid unacceptable or undesirable situations, taking into account that changes in fisheries systems are slow to reverse, poorly understood, difficult to control, and subject to shifts in the environment and in human values.”

THE SIX PRINCIPLES OF THE WILD SALMON POLICY

PRINCIPLE ONE:

Wild Pacific salmon will be conserved by maintaining diversity of local populations and their habitats

The preservation of the quality, diversity and productive capacity of salmon habitat, and its accessibility to salmon, should be the primary consideration of any strategy to conserve wild Pacific salmon. Implementation of Principle One will be guided by the *Policy for the Management of Fish Habitat*.

PRINCIPLE TWO:

Wild Pacific salmon will be managed and conserved as aggregates of local populations called “conservation units”

The goal of maximizing sustainable benefits from local fish populations must be balanced against the cost and practicality of doing so. Thousands of local populations exist in British Columbia alone, and it is logistically impossible to manage each population individually. However, it should be possible to conserve the genetic diversity of local populations by managing conservation units, defined as aggregates of closely related

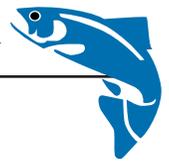


UNIQUELY COMPLEX

The remarkable ability of salmon to return to their natal stream is called homing. Precise homing creates local populations, affording an opportunity for genetic adaptation whereby inherited traits improve survival in the local environment. These local adaptations may be very important and explain why it is so difficult to establish new populations by transplanting eggs or juveniles from one location to another. The evolution of local genetic adaptations gives the conservation of Pacific salmon its uniquely complex character.

Local salmon populations have evolved in different habitats and are largely isolated from other such populations. Because natural selection favours individuals that are best adapted to their habitat, local populations typically exhibit genetic adaptations. These genetic adaptations enhance the productivity of naturally spawning populations of Pacific salmon. Consequently, the potential for sustained benefits from wild salmon is maximized by maintaining the greatest genetic diversity of salmon populations in the greatest number of habitats.

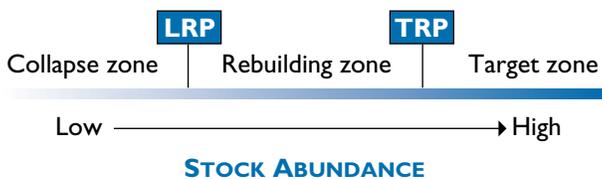




populations with similar productivity and vulnerability to fisheries.

**PRINCIPLE THREE:
Minimum and target levels of abundance will be determined for each conservation unit**

Operational targets and constraints should be expressed in measurable terms. A *limit reference point (LRP)* and one or more *target reference points (TRP)* will be specified for each conservation unit, based on estimates of productive capacity. The aim is to have a total stock abundance at or over the target reference point. A total abundance below the target reference point but above the limit reference point implies that the conservation unit is secure, but requires rebuilding. A total abundance below the limit reference point implies a stock collapse, and indicates that the long-term viability of the conservation unit is at risk.



**PRINCIPLE FOUR:
Fisheries will be managed to conserve wild salmon and optimize sustainable benefits**

Management plans should be specified for each conservation unit, including options based on a range of abundance forecasts or in-season estimates for the conservation unit. Objectives and corresponding allowable harvest will be developed in consultation with First Nations and stakeholders, and in accordance with other Department policies such as *An Allocation Policy for Pacific Salmon* (October 1999). Objectives and harvest rules may vary between conservation units.

**PRINCIPLE FIVE:
Salmon cultivation techniques may be used in strategic intervention to preserve populations at greatest risk of extirpation**

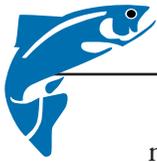
Genetic diversity and fitness are threatened by chance events whenever local population abundance declines to critically low levels. Technologies such as fish culture, brood stock rearing (aquaculture) and gene banking may be used strategically to reduce loss of genetic diversity at critically low abundance levels. However, strict guidelines are required to ensure that these technologies do not adversely and irreversibly affect the long-term productivity of the conservation unit.

**PRINCIPLE SIX:
For specified conservation units, when genetic diversity and long-term viability may be affected, conservation of wild salmon populations will take precedence over other production objectives involving cultivated salmon**

Inevitably, some forms of salmon cultivation will lead to ecological or genetic interactions between wild and cultivated salmon. These interactions may affect genetic diversity and long-term viability of wild salmon. Accordingly, all proposals involving salmon cultivation (enhancement or aquaculture) must be reviewed carefully to minimize adverse effects on natural production.

HOW WILL THE WILD SALMON POLICY AFFECT SALMON ENHANCEMENT?

The Wild Salmon Policy does not preclude enhancement or cultivation, but provides a framework around which enhancement can occur. The use of enhancement is recognized in the policy as a tool to preserve populations at the greatest risk of extinction and as a means of



meeting production objectives where it is possible to minimize the adverse affects on natural populations. In practice, this means that when rebuilding is the objective, enhancement will focus on returning the population to self-sustaining status and will cease when rebuilding

targets are met. When the objective is production, enhancement strategies will likely focus on providing distinct fishing opportunities in terminal or selective fisheries. Long-term enhancement may be required and may be limited to specific geographic zones.

WE WANT TO HEAR FROM YOU

Consultations on the Salmonid Enhancement Program are taking place between April and June, 2000. There will be a series of community forums/open houses throughout the province, as follows:

Tuesday, May 23	BELLA COOLA	Lobelco Hall
Tuesday, May 30	KAMLOOPS	Riverside Coliseum
Thursday, June 1	PRINCE GEORGE	Hart Community Centre (Lions Community Centre)
Tuesday, June 6	PRINCE RUPERT	Fisherman's Hall
Thursday, June 8	SMITHERS	Hudson Bay Lodge (note new location)
Monday, June 12	PORT HARDY	Port Hardy Civic Centre
Wednesday, June 14	CAMPBELL RIVER	Anchor Inn (Ramada)
Thursday, June 15	PORT ALBERNI	ECHO Centre
Tuesday, June 20	SECHLT	Senior Activity Centre
Thursday, June 22	VICTORIA	University of Victoria Student Union Building
Tuesday, June 27	ABBOTSFORD	Abbotsford District Teachers Building
Wednesday, June 28	QUEEN CHARLOTTES	Queen Charlottes Community Hall
Thursday, June 29	RICHMOND	Best Western Richmond Inn

The format of these events will be:

12:00 - 1:00 pm	Open House on Wild Salmon Policy and Salmonid Enhancement Program
1:00 - 2:45 pm	Presentation and discussion on Wild Salmon Policy
3:00 - 4:45 pm	Presentation and discussion on Salmonid Enhancement Program
5:00 - 7:00 pm	Open House (continued)
7:00 - 8:00 pm	Presentations (repeated), brief discussion
8:00 - 9:00 pm	Open House (continued)

For more information on venues, see our website: <http://www-comm.pac.dfo-mpo.gc.ca/wsp-sep-consult/> or call (604) 666-6614.

You can contribute your comments and suggestions in any of the following ways:

- By attending one of the community forums
- By filling in the response form on our website at <http://www-comm.pac.dfo-mpo.gc.ca/wsp-sep-consult/>
- By filling in the response form and returning it by mail to:
 - WSP/SEP Consultations,
 - Fisheries and Oceans Canada,
 - 360-555 West Hastings,
 - Vancouver, B.C. V6B 5G3
 - or fax (604) 666-0292.
 - Copies of the response form may be obtained by calling (604) 666-6614.