

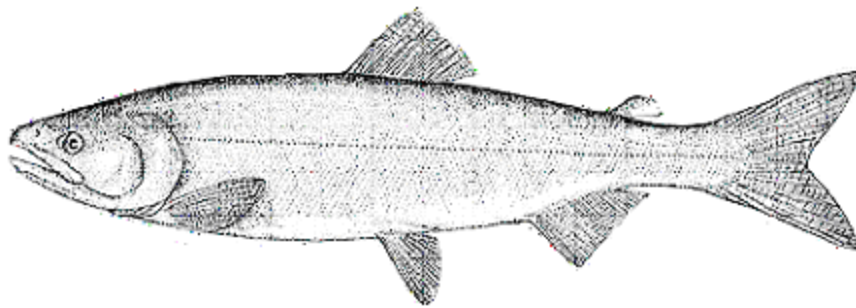


Northern Pacific Salmon Integrated Fisheries Management Plan Summary

Genus Oncorhynchus

This IFMP covers fisheries in tidal and non-tidal waters from Cape Caution north to the BC/Alaska border, including the Skeena River watershed

As of 2016



The purpose of this Integrated Fisheries Management Plan (IFMP) summary is to provide a brief overview of the information found in the full IFMP. This document also serves to communicate the basic information on the fishery and its management to DFO staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic “rules” for the sustainable management of the fisheries resource. The full IFMP is available on request.

This IFMP summary is not a legally binding instrument which can form the basis of a legal challenge. The IFMP can be modified at any time and does not fetter the Minister's discretionary powers set out in the *Fisheries Act*. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

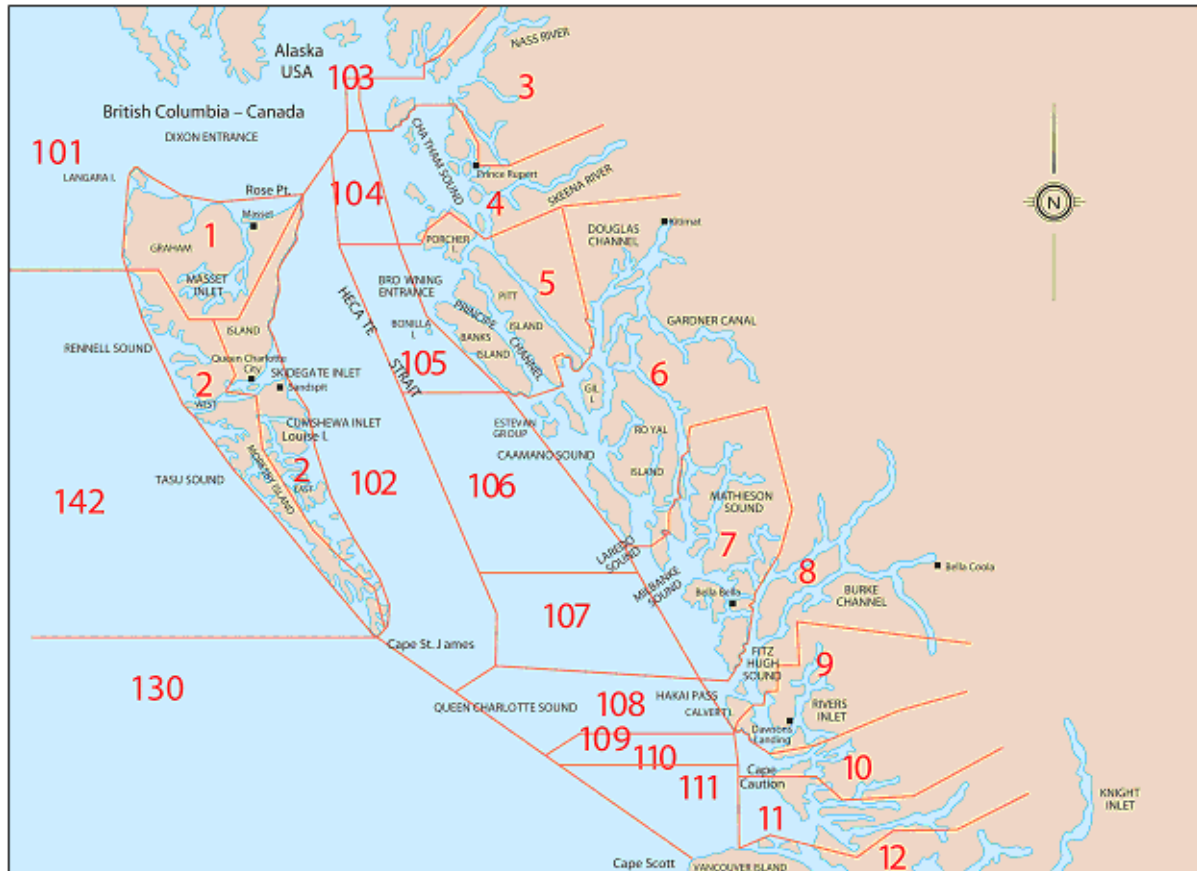
Where DFO is responsible for implementing obligations under land claims agreements, the IFMP will be implemented in a manner consistent with these obligations. In the event that an IFMP is inconsistent with obligations under land claims agreements, the provisions of the land claims agreements will prevail to the extent of the inconsistency.

General Overview/Introduction, including map

This 2016/2017 Northern B.C. Salmon Integrated Fisheries Management Plan (IFMP) covers the period June 1, 2016 to May 31, 2017.

This IFMP provides a broad context to the management of the Pacific salmon fishery and the interrelationships of all fishing sectors involved in this fishery.

This IFMP is designed to describe the approach to fisheries in tidal and non-tidal waters from Cape Caution north to the BC/Alaska border, including the Skeena River watershed (Figure 1). Fishing plans for First Nation, Recreational and Commercial fisheries are included in Section 13 of the IFMP.



Stock Assessment, Science & Traditional Knowledge

Biology

Pacific salmon include five species belonging to the genus *Oncorhynchus* family Salmonidae: pink (*O. gorbuscha*), chum (*O. keta*), sockeye (*O. nerka*), coho (*O. kisutch*) and chinook (*O. tshawytscha*). The native range of Pacific Salmon includes the north Pacific Ocean, Bering Strait, south-western Beaufort Sea and surrounding fresh waters. They occur in an estimated 1300-1500 rivers and streams in BC and Yukon; notably, the Skeena River and Nass River in the north and the Fraser River in the south that accounts for about 75% of the total salmon numbers.

Pacific salmon complete their life cycle by returning to their natal stream to spawn, in many cases to the particular gravel bed where they were hatched. Homing of Pacific salmon to their natal stream is an

important biological characteristic of salmon stocks. Each stock is genetically adapted to the environment in which it resides, and exhibits unique characteristics such as life history, migration route, migration timing, and productivity. Sockeye and chinook travel the farthest upstream to spawn, as far as 1,500 kilometers. Chum, coho and pink usually spawn closer to the sea.

The numbers of Pacific salmon returning to BC waters varies greatly from year to year and decade to decade, often with pronounced population cycles. For example, many sockeye salmon populations are very abundant every third or fourth year. This is seen most dramatically in the Fraser River, where the abundance of some populations in abundant years is many times larger than that of other years. Longer term cycles are also apparent but less regular and seem to be associated with changes in ocean conditions that affect survival during the feeding migration.

Aboriginal Traditional Knowledge (ATK)/Traditional Ecological Knowledge (TEK)

Both Traditional Ecological Knowledge (TEK) and Aboriginal Traditional Knowledge are cumulative knowledge gathered over generations and encompass regional, local and spiritual connections to ecosystems and all forms of plant and animal life. ATK is knowledge held by Aboriginal communities while TEK is local knowledge held by Non-Aboriginal communities, including industry, academia, and public sectors. While qualitatively different both are cumulative knowledge gathered over generations and are regionally and locally specific. Both forms of knowledge can often be utilized to improve the management process. The growing awareness of the value of TEK/ATK is reflected in the increasing requirements for it to be included in environmental assessments, co-management arrangements, species at risk recovery plans, and all coastal management decision-making processes. Both are needed to inform and fill knowledge gaps related to the health of salmon stocks and to aid decision making related to development and resource use. Government and the scientific community acknowledge the need to access and consider ATK/TEK in meaningful and respectful ways. However, the challenge for resource managers is how to engage knowledge holders and how to ensure that the information can be accessed and considered in a mutually acceptable manner, by both knowledge holders, and the broader community of First Nations, stakeholders, managers, and policy makers involved in the fisheries.

Stock Assessment

Salmon stock assessment is primarily concerned with providing scientific information for conservation and management of salmon resources. Stock assessment describes the past and present status of salmon stocks and forecasts future status of stocks under different scenarios. Stock assessment programs contribute information to the fisheries management process, from the initial setting of objectives (and policies) to providing expert advice in the implementation of management plans. Stock assessment information also supports First Nation and Treaty obligations, integrated ocean management planning, development of marine protected areas, protection and recovery of species at risk, and international Treaty obligations and negotiations.

External partners and clients play an increasing role in delivery of the stock assessment activities. Some First Nations, recreational and commercial harvesters contribute directly through data collection and reporting. First Nations and community groups conduct field data collection projects. Universities and non-government organizations (NGOs) are active in the analytical and peer review elements. Stock assessment staff collaborates with other regional, national and international organizations and conduct numerous cooperative and/or joint programs.

Section 2 outlines the ecosystem overview and interactions.

Shared Stewardship Arrangements

As outlined in Section 3, in Pacific Region, DFO consults with and engages First Nations and other interests through a wide range of processes. For salmon, the focal point for DFO's engagement with First Nations, the harvest sectors and environmental interests is around the development and implementation of the annual IFMP. At a broad, Province-wide level, the Integrated Harvest Planning Committee (IHPC)

brings together First Nations, commercial and recreational harvesters, and environmental interests to review and provide input on the draft IFMP, as well as coordinate fishing plans and (where possible) resolve potential issues between the sectors.

Other processes, such as the First Nations Salmon Coordinating Committee (SCC) and the Forum on Conservation and Harvest Planning, are being developed in order to facilitate dialogue between First Nations and DFO. Engagement between DFO and First Nations also takes place through a number of bilateral and “integrated” (multi-interest) advisory processes, management boards, technical groups and roundtable forums.

In addition to integrated dialogue through the IHPC, the Department also works directly with the commercial and recreational sectors, largely through the Commercial Salmon Advisory Board (CSAB) and Sport Fishing Advisory Board (SFAB), respectively. The Department also officially consults with the Marine Conservation Caucus, an umbrella group representing eight core environment groups.

Economic, Social, Cultural Importance

Section 4 of the IFMP provides a socio-economic review of the salmon fishery in British Columbia. In future years, information on the social and cultural context of the various fisheries can be added, where available. This summary addresses salmon in the context of the Aboriginal food, social, and ceremonial fishery, the Aboriginal communal commercial fishery, the recreational and commercial fishing sectors, the processing sector and the export market. DFO recognizes the unique values of each of the fisheries described here. The overview provided in this profile is intended to help build a common understanding of the socio-economic dimensions of each fishery rather than compare the fisheries. Where possible this summary highlights information specific to the North Coast.

Governance Process

Departmental policy development related to the management of fisheries is guided by a range of considerations that include legislated mandates, judicial guidance and international and domestic commitments that promote biodiversity and a precautionary, ecosystem-based approach to the management of marine resources. Section 1.6 outlines the policies that were developed with considerable consultation from those with an interest in salmon management. While the policies themselves are not subject to annual changes, implementation details are continually refined as appropriate.

Please see the salmon consultation website for more information:

<http://www.pac.dfo-mpo.gc.ca/consultation/index-eng.html>

Access and Allocations

The Minister can, for reasons of conservation or for any other any other valid reasons, modify access, allocations and sharing arrangements outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

International

Details can be found at the Pacific Salmon Commission (PSC) website at: <http://www.psc.org/Index.htm>.

Allocation Guidelines

An Allocation Policy for Pacific Salmon can be found on-line at:

<http://www.dfo-mpo.gc.ca/Library/240366.pdf>

Allocation decisions are made in accordance with the *Allocation Policy for Pacific Salmon*.

Figure 1 below describes a generalized framework by which fishing opportunities are allocated to different fishing sectors at different abundance levels.

Figure 1: Allocation guidelines

| | Low Abundance | | High Abundance | | |
|--------------------------|------------------------|--------------------|--------------------|--------------------|----------|
| First Nations FSC | Non-retention / closed | By-catch Retention | Directed | Directed | Directed |
| Recreational | Non-retention / closed | Non-retention | By-catch Retention | Directed | Directed |
| Commercial | Non-retention / closed | Non-retention | By-catch Retention | By-catch Retention | Directed |

NOTE: This table describes conceptually how First Nations, recreational and commercial fisheries might be undertaken across a range of returns. It does not imply that specific management actions for all stocks exactly follow these guidelines, but rather is an attempt to depict the broad approach.

The allocation guidelines above refer to directed fisheries on a species. The application of the *Allocation Policy for Pacific Salmon* on non-target stocks is case specific. The inadvertent harvest of different species of concern is referred to as *by-catch*. The inadvertent harvest of stocks of concern within the same species (i.e. Cultus Lake sockeye when harvesting Summer Run sockeye) is referred to as *incidental harvest*. Both *by-catch* and *incidental harvest* are factored into the calculation of exploitation rates on various stocks, and therefore, fishing plans are designed to be consistent with existing policies and to keep exploitation rates on stocks of concern within the limits described in the fishery management objectives.

All harvest groups have recommended that the Department consult on by-catch/incidental harvest allocations. However, the Department does not generally allocate by-catch or portions of the acceptable exploitation rate on stocks of concern. The Department considers a number of fishing plan options and attempts to address a range of objectives including minimizing by-catch and incidental catch.

Section 7 of the IFMP outlines the detailed information on the First Nation, Recreational and Commercial fisheries.

Commercial Salmon Allocation Framework

In September 2013, the First Nations Salmon Coordinating Committee (SCC) and the Commercial Salmon Advisory Board (CSAB) were engaged by the Department in a process to provide advice on updating the Commercial Salmon Allocation Framework (CSAF). Specifically, this work focused on the part of *Allocation Policy for Pacific Salmon* which outlines how the commercial salmon allowable harvest is shared among commercial salmon fisheries after accounting for conservation, First Nations food, social and ceremonial requirements and recreational sharing arrangements.

Since then, a series of productive meetings were held with the SCC, CSAB and interested First Nations to develop potential updates to the CSAF, guided by a Terms of Reference to address shortcomings in the CSAF identified by commercial harvesters and First Nations. Based on recommendations and feedback received through the draft IFMP process, the Department has determined changes which are outlined in the sections below.

Section 12.4 outlines the commercial allocation plan with shares by species, fleet and fishery production area and Appendix 6 outlines a description of other changes.

For background information on this initiative, including the Departments' Terms of Reference for the work and links to the independent facilitator's reports (which provide a summary from meetings held with the

SCC and the CSAB, analysis completed and detailed proposals received and considered), please go to: <http://www.pac.dfo-mpo.gc.ca/consultation/smon/saf-crrs/index-eng.html>.

Management of the Fishery

Section 6 of the IFMP outlines the fishery management objectives for stocks of concerns. The decision guidelines, specific management measures for each fishery and specific fishing plans are described in Section 13.

| # | Management Issue | Objectives | Management Measure |
|---|--|---|--|
| 1 | Rivers and Smith Inlets sockeye salmon | - Continue with rebuilding these stocks to reach escapement goals and achieve a sustainable stock that will support harvest. | <p>The Docee Fence provides an accurate in-season estimate of returns that can be used to provide in-season abundance estimates. To have a commercial sockeye opening in Smith Inlet, Docee Fence counts will have to clearly indicate that the escapement goal will be achieved and a surplus is available.</p> <p>For Rivers Inlet sockeye, commercial openings are unlikely until a clear trend towards higher productivity is established and documented by the annual surveys of spawning adults.</p> |
| 2 | Skeena River Sockeye | - Maintain sustainable stocks consistent with the WSP and support FSC, commercial and recreational harvests. | To achieve the objective, Canadian commercial exploitation rates will be based on an abundance-based formula that takes into account the forecasts aggregate Skeena sockeye return to Canada and the status of Skeena sockeye stocks where information is available. |
| 3 | Nass sockeye | -Maintain sustainable stocks that will meet WSP conservation objectives and support FSC and Treaty harvests, as well as commercial and recreational harvests. | Nass sockeye will be managed to achieve an aggregate spawning escapement target of 200,000. Returns in excess of the escapement target are harvested in FSC, Nisga'a Treaty and Commercial harvest opportunities. Similar to the past two years, management measures will be in place to reduce impacts to specific stocks of concern. |

| | | | |
|---|---|--|--|
| 4 | North coast chum | <p>- Rebuild weak wild runs, while providing opportunities to harvest surplus stocks.</p> | <p>North Coast wild chum stocks remain depressed and management actions in areas 3 to 6 will continue to be taken to reduce fishery impacts. Specific chum rebuilding plans have been developed for Skeena and Nass chum stocks Please see Appendices 7 and 8 for more details.</p> |
| 5 | West Coast of Vancouver Island (WCVI) chinook | <p>- Manage Canadian ocean fisheries (specified below) to an exploitation rate of 10%. - For North Coast chinook the objective is to manage in accordance with the allocation policy, and to manage the northern troll fishery to a WCVI chinook exploitation rate of 3.2%.</p> | <p>DFO will manage commercial troll fisheries in the North Coast to a 3.2% exploitation rate ceiling on total WCVI chinook return to Canada. The allowance for mortalities of WCVI chinook in the Area F troll fishery is calculated based on 3.2% of the total WCVI return to Canada as an in-season proxy for exploitation rate. The in-season exploitation rate will be estimated using the mean effort-harvest rate relationship developed from historical DNA analysis. The fishery will be further constrained by remaining closed during the first three weeks of June and the month of August as these periods are known to have higher proportions of WCVI chinook in the total catch. DNA analysis and coded-wire tag analysis of catch will be used to assess the 3.2% exploitation rate objective post season.</p> |
| 6 | Skeena Steelhead | | <p>DFO and the province of BC have renewed discussions on a joint approach to the management of steelhead returning to the Skeena watershed consistent with the 1999 fisheries management protocol between the federal and provincial governments. This work is intended to specify clear management objectives, management responses and mechanisms for technical support, management planning, communication and dispute resolution. Work on this approach will include consultations with First Nations and stakeholders.</p> |

Compliance Plan

Specific objectives for the salmon fishery will be to focus compliance management efforts on:

- Support development and implementation of the Strategic Framework for Fishery Monitoring and Catch Reporting in the Pacific Fisheries.

- Monitoring in-river and in marine approach waters by intelligence to target priority fisheries and compliance issues.
- Work with stakeholders to improve regulatory compliance.

As outlined in Section 8, salmon fishery compliance continues to be a priority for C&P. There are, however, other competing priorities such as habitat management, the Canadian Shellfish Sanitation Program, and the protection of Species at Risk.

In order to balance multiple program demands, C&P applies a risk-based integrated work planning process at the Regional and Area levels. This process ensures that resources are allocated appropriately. Resource utilization is dependent on availability of program funding.

For additional information on this IFMP Summary or to request an electronic version of the full IFMP, please contact the Regional Salmon Officer via email at: Kelly.Binning@dfo-mpo.gc.ca or at 604-666-3935.