



Fish Stocks Provisions and Rebuilding Plans

Presented to CRR
November 29, 2022
Kamloops

Outline

- Amendments to the Fisheries Act (2019)
- Legislative Requirements for Prescribed Stocks
 - Section 6.1 and Section 6.2
- Elements of a Rebuilding Plan
- Major Fish Stocks and Limit Reference Points
- Criteria for Prescribing Stocks
- Collaboration
- Next Steps



Amendments to the *Fisheries Act* and the *Fishery (General) Regulations*

The *Fisheries Act* was amended in June of 2019 and included new Fish Stocks Provisions requiring:

- 6.1 measures to maintain stocks at sustainable levels
- 6.2 rebuilding plans for stocks below their limit reference points
- 6.3 the above provisions apply to stocks that are prescribed in regulation

The Department intends to prescribe the stocks in batches. Batch 1 was amended into The *Fishery (General) Regulations* in April 2022 and included 30 fish stocks nationwide:

- Three Pacific Salmon stocks in Batch 1: West Coast Vancouver Island Chinook, Okanagan Chinook, and Interior Fraser Coho.

Legislative Requirements for prescribed stocks

S6.1 *In the management of fisheries, the Minister shall implement measures to maintain major fish stocks at or above the level necessary to promote the sustainability of the stock, taking into account the biology of the fish and the environmental conditions affecting the stock.*

- DFO must meet the obligations of the FSP when managing fisheries. These obligations apply to prescribed major fish stocks defined at the scale of their LRPs, rather than to any specific fishery on a stock.

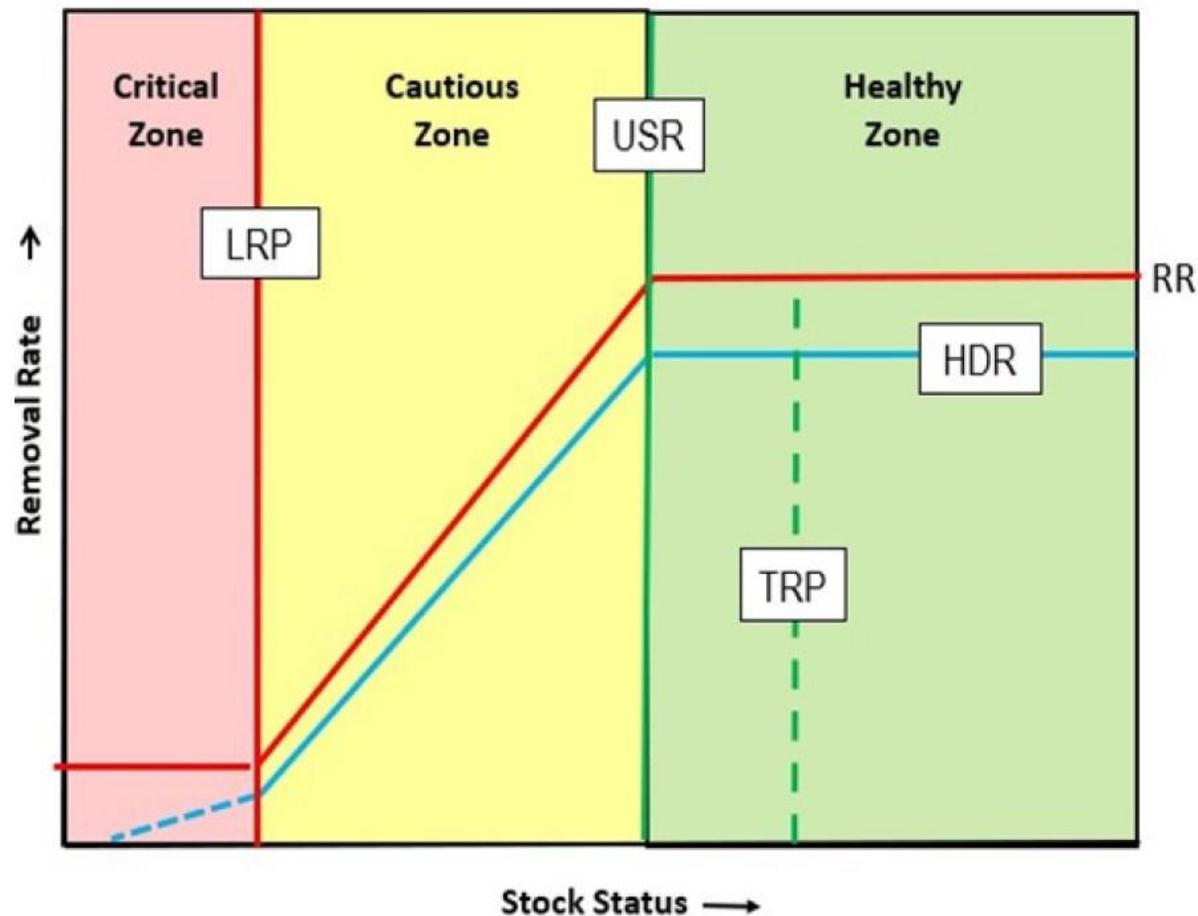
Management measures must seek to:

- Avoid the prescribed major fish stock declining to or below its LRP (Critical Zone) with a high to very high likelihood
- Avoid exceeding its Removal Reference (RR) with a moderately high to very high likelihood

S6.2 *If the Minister is of the opinion that it is not feasible or appropriate, for cultural reasons or because of adverse socio-economic impacts, to implement the measures referred to in subsection (1), the Minister shall set a limit reference point and implement measures to maintain the fish stock above that point, taking into account the biology of the fish and the environmental conditions affecting the stock.*

When is a Rebuilding Plan required?

- If a stock is above the LRP it comes under Section 6.1
 - Management regime consistent with the Precautionary Approach to avoid falling below the LRP.
 - E.g. Interior Fraser Coho
- If a stock is below the LRP it comes under Section 6.2
 - Rebuilding plan must be developed within 24-months.
 - E.g. WCVI Chinook, Okanagan Chinook



Elements of a Rebuilding Plan

The following are the sections that will be part of a Rebuilding Plan. The **BOLD** sections are legally required by regulation for major stocks subject to Section 6.2 under the Fish Stocks Provisions:

- a) Introduction and context;
- b) Stock status and stock trends;**
- c) Probable causes for the stock's decline;**
- d) Measurable objectives aimed at rebuilding the stock;**
 - i. Rebuilding target and timeline;
 - ii. Additional measurable objectives and timelines;
- e) Management measures aimed at achieving the objectives;**
- f) Socio-economic analysis;
- g) Method to track progress towards achieving the objectives;**
- h) Periodic review of the rebuilding plan;**
- i) References

Full guidance document can be found here:

<https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precautionary-precaution-eng.htm>

Elements of a Rebuilding Plan

Context;

- Biology of the stock;
- Relevant environmental conditions or ecosystem factors affecting the stock
 - Including any aquatic invasive or non-indigenous species;
- Current management measures and key participants
- Historical Information

This section may also include:

- Cultural and socio-economical impacts of the declines of the stock to date;
- Indigenous Knowledge
- COSEWIC or SARA assessments (e.g. RPAs, Management Scenarios)
- Description of the process and Indigenous groups and stakeholders involved in the development of the plan

Elements of a Rebuilding Plan

Stock status and stock trends

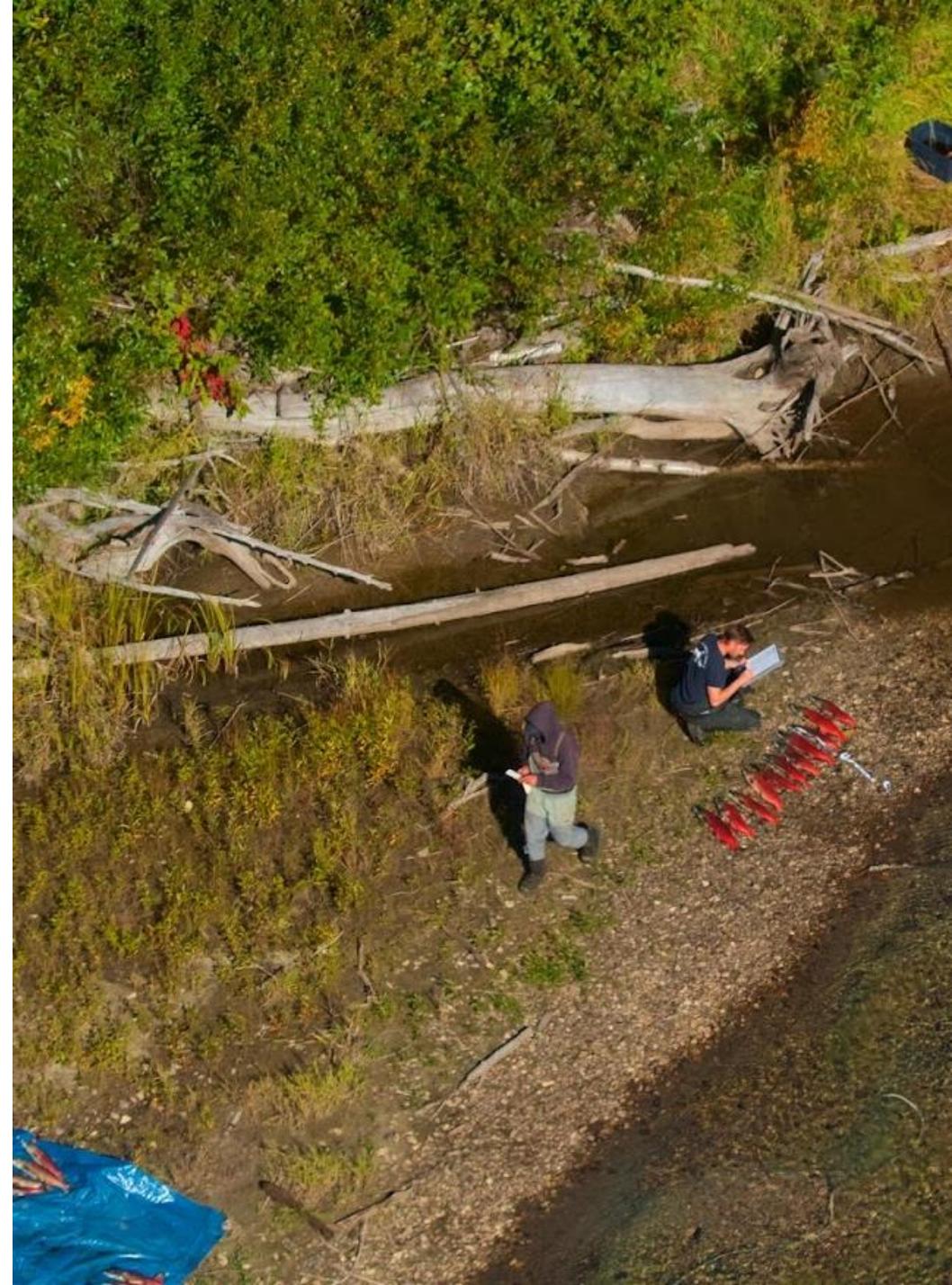
- Current status relative to PA reference points
- Stock status trends
- Most recent applicable science advisory or stock assessment document for the stock
- Indigenous knowledge



Elements of a Rebuilding Plan

Probable causes for the stock's decline;

- Probable factors that have led to the decline of the stock as well as those that may affect rebuilding.
- The factors to cover include:
 - Anthropogenic factors (Fishing and non-fishing mortality)
 - Biology of the stock
 - Natural mortality (including predator/prey interactions)
 - Environmental impacts (including climate, oceanographic and ecosystem factors)
 - Habitat limitations
 - International issues



Elements of a Rebuilding Plan

Measurable objectives aimed at rebuilding the stock;

1. Rebuilding target and timeline;

- This consists of defining the rebuilding target, the likelihood of attaining the rebuilding target, and the time frame to achieve the target

2. Additional measurable objectives and timelines;

- Fisheries Management
 - Mixed stock and multi-species fisheries, stock conservation, cultural and socio-economic, shared jurisdictions and/or transboundary, straddling or highly migratory stocks
- Habitat
- Monitoring and Compliance
- Knowledge Gaps

Elements of a Rebuilding Plan

Management measures aimed at achieving the objectives;

- The purpose of this section of the rebuilding plan is to describe all the management measures that will be in place under the rebuilding plan.
 - Each measurable objective must have at least one associated management measure designed to achieve the objective.
 - Must be consistent with the criteria in 2009 PA Policy



Elements of a Rebuilding Plan

Method to track progress towards achieving the objectives;

- Outline the performance metrics that will be used to measure progress
 - Rebuilding target
 - Frequency at which each metric will be evaluated against the objective (most metrics will likely be measured annually or during each stock assessment).
 - Each measurable objective must be linked to a performance metric.

Periodic review of the rebuilding plan;

- Including a schedule for reviews, description of the process to review, and results of previous reviews



Major Fish Stock and Limit Reference Points (LRP)

- For Pacific Salmon, Stock Management Units (SMUs) consisting of one or more Wild Salmon Policy Conservation Units (CUs) are proposed as 'major fish stocks'
 - There are currently 69 SMUs
 - SMU is a group of CUs that are managed collectively, with common timing and/or geographic distribution
 - Five Fraser Chinook SMUs: Spring 4₂, Spring 5₂, Summer 4₁, Summer 5₂, Fall 4₁
 - SMU is considered major when it is prescribed in regulation
- These provisions create the demand for methods to estimate LRPs and status at the SMU level, while considering the Wild Salmon Policy (DFO 2005) goal to maintain component CUs above their lower benchmarks in part to conserve adaptive diversity.
- LRPs are also required under DFO's Precautionary Approach (DFO 2009)



Major Fish Stock and Limit Reference Points (LRP)

- CSAS March 2022; Methodologies and Guidelines for Defining Limit Reference Points for Pacific Salmon
- Science Advisory Report 2022/030:
 - Recommends that a SMU be considered below the LRP if at least one CU within the SMU is in the Red zone, as assessed under the WSP
 - Lower benchmarks are identified at levels to allow a substantial buffer against extinction risk and are proposed to represent levels above serious harm.
 - CU status is derived from a composite of metrics, as recommended for assessments under the Wild Salmon Policy (Holt et al. 2009).
- Next steps are to apply these methods to salmon SMUs

Criteria for Prescribing Stocks

- Elements of the PA framework in place?
 - Limit Reference Point (LRP), Upper Stock Reference (USR)
 - Removal Reference (RR; Healthy Zone)
 - Removal Reference (RR; Cautious Zone)
 - Removal Reference (RR; Critical Zone)
 - Target Reference Point (TRP)
 - Interim objective/target (if no USR/TRP)
 - Harvest Decision Rules (HDR)
- Resources available to complete the Rebuilding Plan within 24 months
- Feasibility of meeting the regulatory timeline



Collaboration

- Beneficial work on a SMU does not have to wait until a stock is prescribed in regulation
- The Department will work collaboratively with First Nations and other interested parties to ensure that Rebuilding Plans can be completed within the 24-month timeframe.
- Department is working with Okanagan Nation Alliance to build on their existing work on Okanagan Chinook to collaboratively develop a rebuilding plan
- Also working with 14 Nuu-chah-nulth First Nations well before the existence of the FSP amendments in 2019 to jointly develop rebuilding efforts for WCVI Chinook
- Both of these rebuilding plans are scheduled to be completed by Spring 2024
- How can we work together to ensure that Rebuilding Fraser Chinook can be done in an integrated and collaborative way?
 - Also Fraser (Early Stuart) Sockeye and Fraser Pink

Next Steps – Batch 2

- Seeking feedback on a proposal for a regulatory amendment to the Fishery (General) Regulations to list the second batch of major fish stocks
 - Yukon Chinook
 - Fraser (Early Stuart) Sockeye
 - Barkley Sound Sockeye
 - Fraser River Pink
- To provide feedback, you are encouraged to visit the DFO website before December 19, 2022:
- <https://www.dfo-mpo.gc.ca/about-notre-sujet/engagement/2022/fish-stock-provisions-dispositions-stocks-poissons-eng.html>
- Should you have any comments or questions on the proposed amendments, please send your feedback to:
DFO.Rebuilding-Retablissement.MPO@dfo-mpo.gc.ca

A close-up photograph of a salmon leaping from the water. The fish is captured mid-air, with its body arched and its tail fin fully extended upwards. The water around the fish is splashing and turbulent, with many white droplets and bubbles. The background is a blurred, brownish-green water surface.

Questions?

Salmon Rebuilding Team

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APPENDICES

Fisheries Act - Fish Stocks Provisions

Measures to maintain fish stocks

6.1 (1) In the management of fisheries, the Minister shall implement measures to maintain major fish stocks at or above the level necessary to promote the sustainability of the stock, taking into account the biology of the fish and the environmental conditions affecting the stock.

Limit reference point

(2) If the Minister is of the opinion that it is not feasible or appropriate, for cultural reasons or because of adverse socio-economic impacts, to implement the measures referred to in subsection (1), the Minister shall set a limit reference point and implement measures to maintain the fish stock above that point, taking into account the biology of the fish and the environmental conditions affecting the stock.

Publication of decision

(3) If the Minister sets a limit reference point in accordance with subsection (2), he or she shall publish the decision to do so, within a reasonable time and with reasons, on the Internet site of the Department of Fisheries and Oceans.

Plan to rebuild

6.2 (1) If a major fish stock has declined to or below its limit reference point, the Minister shall develop a plan to rebuild the stock above that point in the affected area, taking into account the biology of the fish and the environmental conditions affecting the stock, and implement it within the period provided for in the plan.

Fisheries Act - Fish Stocks Provisions cont.

Amendment

(2) If the Minister is of the opinion that such a plan could result in adverse socio-economic or cultural impacts, the Minister may amend the plan or the implementation period in order to mitigate those impacts while minimizing further decline of the fish stock.

Endangered or threatened species

(3) Subsection (1) does not apply if the affected fish stock is an endangered species or a threatened species under the *Species at Risk Act* or if the implementation of international management measures by Canada does not permit it.

Publication of decision

(4) If the Minister amends a plan in accordance with subsection (2) or decides not to make one in accordance with subsection (3), he or she shall publish the decision to do so, within a reasonable time and with reasons, on the Internet site of the Department of Fisheries and Oceans.

Restoration measures

(5) In the management of fisheries, if the Minister is of the opinion that the loss or degradation of the stock's fish habitat has contributed to the stock's decline, he or she shall take into account whether there are measures in place aimed at restoring that fish habitat.

Regulations

6.3 The major fish stocks referred to in sections 6.1 and 6.2 are to be prescribed by regulations.

Fishery (General) Regs - Fish Stocks Provisions

Fish Stocks

69 For the purposes of section 6.3 of the Act, the major fish stocks referred to in sections 6.1 and 6.2 of the Act are listed in the table in Schedule IX.

70 (1) A plan to rebuild a major fish stock, required under subsection 6.2(1) of the Act, shall contain the following information:

- (a)** the stock status and stock trends;
- (b)** the probable causes for the stock's decline;
- (c)** measurable objectives aimed at rebuilding the stock, including a target for rebuilding the stock;
- (d)** the timelines for achieving the objectives;
- (e)** the management measures aimed at achieving the objectives;
- (f)** a method to track progress towards achieving the objectives; and
- (g)** a schedule for a periodic review of the plan in order to assess progress towards achieving the objectives and to determine whether an adjustment to the plan is needed.

Fishery (General) Regs - Fish Stocks Provisions

- (2)** The plan shall be developed within 24 months after the day on which the Minister first had knowledge that the major fish stock had declined to or below its limit reference point.
- (3)** The Minister may extend the time period to the extent necessary for completing the plan, by a period not exceeding 12 months.
- (4)** If the Minister extends the time period, the Minister shall publish the reasons for doing so on the Internet site of the Department.
- (5)** If fishing of the major fish stock while the plan is being developed is permitted by the Minister, the Minister shall ensure that the level of fishing of the stock during that time is consistent with the rebuilding of the stock above the limit reference point.
- (6)** Despite paragraph 1(d), if the Minister determines that it is not feasible to establish a timeline for achieving the target for rebuilding the major fish stock, the plan shall include, instead of such a timeline, the reasons why it is not feasible to do so.
- (7)** The Minister shall publish the plan to rebuild a major fish stock and the results of any periodic review of the plan on the Internet site of the Department.