

Pacific Region Région du Pacifique
Suite 200 – 401 Burrard Street Piece 200 – 401 rue Burrard
Vancouver, British Columbia Vancouver (C-B.)
V6C 3S4 V6C 3S4

March 2, 2020

To First Nations and DFO Advisory Groups,

Re: Fraser River Chinook Conservation Measures

This letter is intended to communicate the Department's approach for developing fisheries management actions to address conservation concerns for Fraser River Chinook over the next year.

Given the early run timing of some Fraser Chinook populations, the Department plans to implement management measures that were announced for the 2019 season beginning April 1st, 2020 as interim measures to provide time for a technical review of the 2019 fishery management measures and completion of consultations on possible adjustments to these management measures. The Department plans to meet with First Nations and established advisory groups during consultations in March and April to discuss potential adjustments to management measures, evaluate outcomes and document support for alternative management measures to support decision making. Interim measures beginning April 1st, 2020, will be in place until a decision is made surrounding future measures.

Appendix 1 provides an outline of the consultative process and timelines.

Additional information is outlined below on the conservation concerns for these stocks, considerations for planning, and timelines for decision making.

Conservation concerns

In November 2018, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) released the results for an assessment of 16 southern BC Chinook designatable units (DUs). Of these units, 13 DUs originate in the Fraser River with 7 DUs assessed as *endangered*, 4 threatened and 1 special concern; Southern Thompson Ocean Summer Chinook were deemed not at risk. For the other 3 DUs outside the Fraser River, 1 DU (East Vancouver Island Stream Spring; Nanaimo River) was assessed as *endangered* and 2 Southern Mainland DUs were data deficient. Status information is summarized in **Appendix 2** and at (https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife/assessments/wildlife-species-assessment-summary-nov-2018.html. COSEWIC submitted these assessments to the Government of Canada via the annual report in Fall 2019. This annual report initiated the formal process to consider whether or not to list these DUs under the *Species at Risk Act* (SARA). COSEWIC assessment of the remaining southern BC Chinook populations is also underway, with an expected update on the status of these DUs in April 2020.



Management Objectives

In 2019, DFO announced (https://www.canada.ca/en/fisheries-oceans/news/2019/04/government-of-canada-takes-action-to-address-fraser-river-chinook-decline.html) highly precautionary fishery restrictions intended to provide a high degree of protection to at-risk Fraser Spring 4₂, Spring 5₂ and Summer 5₂ Chinook returning in 2019. The management objective was to reduce overall Canadian fishery mortalities on these populations to near 5%, with actual outcomes expected to vary around this target given uncertainties in the data. Expected fishery mortalities were not intended to be a management target and the objective was to allow as many fish to pass through to the spawning grounds as possible. Fishery impacts were expected to include incidental Chinook mortalities in Fraser River Chinook and Sockeye test fisheries, limited Chinook retention or bycatch retention in Fraser River First Nation FSC fisheries (targeting Summer 4₁ stocks), release mortalities, and incidental mortalities during Chinook-directed fisheries targeting other stocks. For Summer 4₁ and Fall 4₁ Chinook, the precautionary fishery measures announced were also expected to substantially reduce Canadian fishery mortalities on these management units by at least 25%.

While conservation of at-risk Fraser Chinook is the primary objective in managing the resource, the Department was also committed to respecting Constitutional and Treaty obligations to provide priority for First Nations harvest opportunities for Food, Social and Ceremonial and Treaty obligations after conservation requirements are met. In 2019, the Department also implemented restrictions in commercial and recreational fisheries intended to support increased availability of not-at-risk Summer 41 Chinook for First Nations fisheries harvest opportunities during August and September. These restrictions, along with restrictions to support conservation of West Coast Vancouver Island wild Chinook stocks, included an extended closure of the commercial troll fishery in Northern BC until August 20, which was intended to pass through not-at-risk Summer 41 (South Thompson) Chinook that typically comprise 20% to 30% of troll harvests to the Fraser River. The Kamloops Lake commercial demonstration fishery targeting South Thompson (Summer 41) Chinook was also closed. Recreational salmon fisheries in southern BC remained at reduced limits of 1 Chinook per day after the Chinook non-retention period ended (i.e. after July 14 or July 31 depending on area) and recreational fisheries in the Fraser River remained closed past August 23.

2019 Fishery Management Measures

Appendix 3 outlines the specific fishery management measures that were approved by the Minister for implementation in 2019. Additional restrictions were also implemented in-season to address impacts of the Big Bar rockslide on these stocks of concern.

2019 Outcomes

In 2019, spawner abundances of Fraser Chinook Salmon declined substantially compared with the parental brood year abundance for the Spring 4_2 , Spring 5_2 and Summer 5_2 management units, and spawner abundance remained well below S_{MSY} levels (**Table 1**). The large majority (>80%) of Spring 5_2 and Summer 5_2 Chinook typically spawn in the upper Fraser River and spawner returns for these groups were heavily impacted by poor passage success at the Big Bar rockslide. Spawner abundance for Summer 4_1 Chinook was estimated to be above S_{MSY} levels and Fall 4_1 (Harrison) Chinook returns were below the escapement goal.



Table 1: 2019 Spawner abundance relative to the parental brood year and estimates of spawners associated with maximum sustainable yield (S_{MSY})

Management Unit	2019 Spawners (Preliminary)	2019 Brood Year Spawners (2014 for Age 4 and 2015 for Age 5)	Spawners associated with maximum sustainable yield (S _{MSY})
Spring 4 ₂	5,900	11,200	22,146
Spring 5 ₂	3,100	32,900	42,165
Summer 5 ₂	5,500	23,900	23,567
Summer 4 ₁	169,200	179,300	120,322
Fall 4 ₁ (Harrison)	45,200	101,500	75,100
			(PST Escapement Goal)

Notes:

- 1. 2019 Spawner estimates will be updated based on infilling for any rivers that were not surveyed in 2019 or for data have not been report yet (e.g. via partner groups or others).
- S_{MSY} values are derived from habitat-based methods (Parken et al. 2006: https://www.arlis.org/docs/vol1/K/234144596.pdf)

Further analysis is underway to assess the factors that contributed to observed spawner returns in 2019, including an assessment of the effectiveness of management measures to reduce fishing mortality in Canadian fisheries, stock productivity, and impacts from the Big Bar rock slide. The Department has engaged with First Nations and other technical staff to support the completion of this work with the intent of sharing the information broadly with First Nations and stakeholders as soon as it is available.

Process

The Department is seeking feedback from First Nations and stakeholders participating in established IFMP development processes on potential adjustments to the 2019 fishery management measures that are consistent with management objectives. The Department will consider feedback and work with technical experts to evaluate expected outcomes for consistency with proposed management objectives, conservation and allocation priorities, Pacific Salmon Treaty obligations, feasibility (including effective implementation and fostering compliance), fishery benefits, and potential cost considerations (including fishery monitoring and stock assessment programs). Information on the expected outcomes for any proposed management measures will be shared with First Nations and stakeholders as part of established IFMP development processes to determine the level of support for any proposed measures and inform decision making.

The Department has also engaged with First Nations, the Province of BC and stakeholders to establish a Southern BC Chinook Committee that is looking at long-term strategies to address a broad range of issues that are impacting Chinook stocks, including: land and water use issues; fish habitat issues; the role of hatcheries to support rebuilding and the potential for mark-selective fisheries targeting hatchery-origin fish; how predation by seals and sea lions may be affecting Chinook Salmon; and other concerns. The Southern BC Chinook Committee is primarily focused on developing plans to protect, rebuild and restore Chinook and their habitats over the long term. This will require everyone to work toward identifying



mutually-beneficial solutions and ensuring conservation objectives are met to provide for future opportunities. A sub-set of the Southern BC Chinook Committee members are also meeting to support a collaborative discussion of possible fishery management measures for fisheries, including development of a framework for evaluating possible outcomes and coordinating requests for technical analysis. The Department will be sharing information from this process with First Nations and stakeholders engaged in established IFMP development processes.

The Department is seeking feedback from First Nations and established advisory groups on potential adjustments to 2019 management measures or alternative approaches that should be considered for the period June 1, 2020 to May 31, 2021. Feedback is requested in writing, before March 27, 2020 to the DFO Pacific Region Salmon Management Team at:

<u>DFO.PacificSalmonRMT-EGRSaumonduPacifique.MPO@dfo-mpo.gc.ca.</u> The Department will refer any feedback from stakeholders outside the established advisory process to the appropriate advisory body, including Sport Fishing Advisory Board (SFAB), Commercial Salmon Advisory Board (CSAB), Marine Conservation Caucus (MCC), contact for further consideration. Feedback received from First Nations and established advisory groups, will be summarized by the Department and any recommendations on harvest planning will be provided to First Nations and the Departments advisory committees, for further consideration.

Yours sincerely,

DFO Pacific Region Salmon Management Team

DFO.PacificSalmonRMT-EGRSaumonduPacifique.MPO@dfo-mpo.gc.ca

Appendices (3):

- 1. Summary of Stock Status of Fraser River BC Chinook Designatable Units.
- 2. Summary of timelines for process to develop 2020/21 Fraser Chinook Management Actions.
- 3. Chinook management measures implemented in 2019.



Appendix 1: Stock Status of Fraser River BC Chinook Designatable Units.

Fishery Management Unit	Designatable Unit	COSEWIC Assessment	CU and WSP Status no colour = TBD gray = Data Deficient orange = red/amber	Spawning Locations
Casing A Chinash	DU14 BC South Thompson Stream Summer	Endangered	CK-16 STh Bessette Creek	Bessette Creek, Creighton Creek; Duteau Creek; Harris Creek
Spring 42 Chinook	DU15 BC Lower Thompson Stream Spring	Not assessed	CK-17 Lower Thompson Spring	Bonaparte River; Coldwater River; Deadman River; Louis Creek; Nicola River; Spius Creek
Spring 5 ₂	DU3 BC Lower Fraser River Stream Spring	Special Concern	CK-04 LFR Spring	Birkenhead
Chinook	DU4 BC Lower Fraser River Stream Summer (Upper Pitt)	Endangered	CK-05 LFR Upper Pitt	Pitt River-Upper
	DU7 BC Middle Fraser River Stream Spring	Endangered	CK-08 FR Canyon- Nahatlatch	Anderson, Nahatlatch
	DU9 BC Middle Fraser River Stream Spring	Threatened	CK-10 MFR Spring	Cariboo River-upper; Chilako River; Chilcotin River upper; Chilcotin River-lower; Cottonwood River; Horsefly River; Narcosli Creek; Naver Creek; West Road River and others
	DU11 BC Upper Fraser River Stream Spring	Endangered	CK-12 UFR Spring	Bowron River; Dome Creek; East Twin Creek; Fraser River-above Tete Jaune; Forgetmenot Creek; Goat River; Holliday Creek; Holmes River; Horsey Creek; Humbug Creek; Kenneth Creek; McGregor River; McKale River; Morkill River; Nevin Creek; Ptarmigan Creek; Slim Creek; Small Creek; Snowshoe Creek; Swift Creek; Torpy River; Walker Creek; Wansa Creek; West Twin Creek; Willow River; and others
	DU16 BC North Thompson Stream Spring	Endangered	CK-18 NTHOM Spring	Albreda River; Blue River; Finn Creek; Lyon Creek; Mad River



Summer 5 ₂ Chinook	DU5 BC Lower Fraser River Stream Summer	Threatened	CK-06 LFR Summer	Big Silver Creek; Chilliwack/Vedder River; Cogburn Creek; Douglas Creek; Green River; Lillooet River; Sloquet Creek; Tipella Cr.
	DU8BC Middle Fraser River Stream Fall	Endangered	CK-09 MFR Portage	Portage
	DU10 BC Middle Fraser River Stream Summer	Threatened	CK-11 MFR Summer	Bridge River; Cariboo River lower; Chilko River; Endako River; Kazchek Creek; Kuzkwa River; Nechako River; Quesnel River; Seton River; Stellako River; Stuart River; and others
	DU13 BC South Thompson Stream Summer	Not assessed	CK-14 STh Summer age 5 ₂	Eagle River; Salmon River
	DU17 BC North Thompson Stream Summer	Endangered	CK-19 NTHOM Summer	Barriere River; Clearwater River; Lemieux Creek; Mahood River; Mann Creek; North Thompson River; Raft River
	DU6 BC Lower Fraser River Ocean Summer	Not assessed	CK-07 Maria Slough Summer	Maria Slough
Summer 4 ₁ Chinook	DU12 BC South Thompson Ocean Summer	Not At Risk	CK-13 STh Summer age 4 ₁ CK-15 Shuswap River Summer	Adams River; Little River; South Thompson River; Lower Thompson River; Lower Shuswap, Middle Shuswap
Fraser Fall 4 ₁ Chinook	DU2 BC Lower Fraser River Ocean Fall	Threatened	CK-03 LFR Fall	Harrison
ECVI and Mainland Chinook	DU19 BC East Vancouver Island Stream Spring	Endangered	CK-23 East Vancouver Island – Nanaimo Spring	Nanaimo River - Upper



Appendix 2: Summary of timelines for process to develop Fraser Chinook Management Actions

Colour Coding for Appendix 2

Southern BC Chinook Committee Meetings

Fraser Chinook Management Measures Planning

DFO Logistical Process

Meeting Dates	Committee	Agenda/Purpose
	DECEMBER	
December 5	Southern BC Chinook Planning Committee Meeting 1	
December 6	Release of DFO IFMP Planning Letter	Letter Identifying key planning priorities and timelines for season
December 16	Southern BC Post Season Review	Post-Season Review
	JANUARY	
January 2	PSC	Canada's 2019 PSC Post Season Report
January 13	Deadline for responses re: DFO priorities in 2019/20 Planning Letter	Submission deadline for comments on IFMP priorities
January 13-17	PSC Post-Season Meeting	Post-Season review
January 24	Southern BC Chinook Planning Committee Meeting 2	
January 27	2020 Preliminary Salmon Outlook and State of Salmon	
	FEBRUARY	
February 3	Fraser Watershed Joint Technical Working Group	Fraser Salmon Management
February 4-6	Forum on Conservation and Harvest Planning for Fraser Salmon	Post-season
February 5	IHPC Meeting – Northern Subcommittee	Discussion of the IFMP planning priorities and proposals.
February 10	Southern BC Chinook Planning Committee Meeting 3	
February 11	IHPC Meeting – Southern Subcommittee	Discussion of the IFMP planning priorities and proposals.
February 14- 15	SFAB Main Board Meeting	Pre-Season Planning
February 24	Short Term Management Action Chinook Committee Meeting	 Technical Process Update Review Draft Chinook letter Discuss management objectives and evaluation framework Next steps
February 26	Draft IFMP made available to the public for comment	Draft IFMP distributed for Review and Comment



Meeting Dates	Committee	Agenda/Purpose
February 27	SBC Chinook Technical WG meeting	- Information compilation for 2019 management measure review
	MARCH	
March 2	Release Letter on Process to develop 2020/21 Chinook Management Actions; Technical information on 2019 management measures and impacts of Big Bar rockslide will be circulated as soon as available.	- Outline process for developing management actions for 2020/21 fishery
March 5	IHPC Meeting – Southern Subcommittee	Review Draft Southern IFMP
March 9	Fraser Watershed Joint Technical Working Group	Review Draft Southern IFMP and Pre-season Planning
March 10-12	Forum on Conservation and Harvest Planning for Fraser Salmon	Sockeye Forecast and Draft IFMP Contents
March 13	Southern BC Chinook Planning Committee Meeting 4	Focus is on longer term rebuilding plan development (not short term 2020/21 fishery management measures)
March 27	Feedback Due for Feb. 28 Chinook Management Action Letter	 Feedback on proposed adjustments to 2019 management measures.
March 28-29	South Coast SFAB	2020 Planning / IFMP Review
March 27 to April 1	DFO to Aggregate Feedback on the Short Term Management Actions	- Consolidate feedback on potential options for 2020/21 for discussion
	APRIL	
April 1	Implementation of 2019 Chinook Management Measures until further notice	- Initiate 2019 management measures to protect Fraser Chinook stocks of concern until further notice - Further adjustments will be considered pending completion of technical review of 2019 season and consultations on management measures for 2020/21.



Meeting Dates	Committee	Agenda/Purpose
April 2	Meeting with the SBC Chinook committee members to review feedback and potential management options for 2020/21 identified from letter/consultations to date	 Review and adjust potential management options identified. Confirm performance metrics for technical evaluation.
April 3	Full Day Technical Working Group meeting to evaluate options that may be brought forward via the consultation process/feedback and aggregated at the earlier full Chinook Committee meeting	 Preliminary evaluation of expected performance of alternative management options (e.g. compared to 2019 measures) Schedule follow-up meeting(s) as required.
April 6	Fraser Watershed Joint Technical Working Group	Final discussions prior to submitting feedback on draft IFMP
April 7-9	Forum on Conservation and Harvest Planning for Fraser Salmon	Final discussions prior to submitting feedback on draft IFMP
April 15	Deadline for Public Comment on IFMP	Submission deadline for comments on IFMP Draft
April 17-18	SFAB – Mainboard	Review of Draft IFMP - finalize recommendations
April 20-24	Opportunity for additional SBC Chinook Committee and/or Technical process meetings	TBC (if required)
April 28-29	Full IHPC	Present summary of IFMP feedback and responses
April 30	Webinar with Southern First Nation groups	Present summary of IFMP feedback and responses
	MAY	
May 1	Southern BC Chinook Committee Meeting to review the management measures developed through the consultation process	 Final review of evaluation(s) of management alternatives Document areas of agreement and disagreement on potential 2020/21 management measures
May	Decision-making on short-term Fraser Chinook management measures	DFO
	JUNE	



Meeting Dates	Committee	Agenda/Purpose
June 1	Tentative Chinook management measure approval and implementation	- Begin implementation of any adjustments to 2019 management actions (if required) on June 1 (or pending decisions).
June 30	Final IFMP release to public	Public release of finalized 2020/2021 IFMPs



Appendix 3: Chinook management measures approved and implemented in 2019.

Fishery	Chinook Management Measures
Commercial	
NBC AABM (Area F) Troll	o Chinook non-retention to August 20
WCVI AABM (Area G) Troll	Closed to August 1
Kamloops Lake Chinook Demonstration Fishery	o Closed
Recreational	
NBC AABM	No measures proposed for Fraser Chinook
NBC ISBM	No measures proposed for Fraser Chinook
WCVI Subareas 20-1 and 20-2, and offshore Area 121, as well as Areas 123 to 127 seaward of a 1 nm Boundary Line WCVI near shore (Areas 21-27) Queen Charlotte Strait and Johnstone Strait in Area 12 (excluding Subarea 12-14) and Strait of Georgia – North (Areas 13 to 17, 28, portions of 29 (29-1 and 29-2) Strait of Georgia – South and Juan de Fuca Strait Area 18, Subareas 19-3 to	 January 1 to March 31, 2 Chinook per day April 1 to July 14, Chinook non-retention July 15 to July 31, 1 Chinook per day with a maximum size of 80 cm fork length (additional actions implemented in response to Big Bar rockslide) August 1 to December 31, 2 Chinook per day No measures proposed for Fraser Chinook January 1 to March 31, 2 Chinook per day April 1 to July 14, Chinook non-retention July 15 to July 31, 1 Chinook per day with a maximum size of 80 cm fork length (additional actions implemented in response to Big Bar rockslide) August 1 to August 29, 1 Chinook per day August 30 to December 31, 2 Chinook per day January 1 to March 31, 2 Chinook per day April 1 to July 31, Chinook non-retention August 1 to August 29, 1 Chinook per day
19-12, Subareas 29-3 to 29-5, 29-8 and Subareas 20-3 to 20-7 Fraser River non-tidal (Region 2), 29-6 to 29-17 (except 29-8), and the non-tidal waters of the Fraser River from the Mission Bridge u/s to the confluence with Sawmill Creek.	 August 30 to December 31, 2 Chinook per day Jan. 1 to Aug. 23, No fishing for salmon. Aug. 23 to Dec. 31, Chinook non-retention. Fishing opportunities may be provided in tributary areas where and when at-risk Chinook stocks would not be encountered.



Freshwater Regions 3,5,7 & 8	 Closed to fishing for salmon. Fishing opportunities may be provided in tributary areas where and when at-risk Chinook stocks would not be encountered.
All Areas	 Reduced the total annual limit for Chinook in tidal waters to 10 per year (the current total annual limit for Chinook is 30 from any tidal waters with lower limits of 10-20 in specific areas)
o First Nations	
South Coast	 April 1 to July 14, Chinook non-retention in effect in Areas 12 to 21, 121 Subareas 29-1 to 29-7, 29-9, 29-10 and those portions of Areas 123 to 127 one nautical mile seaward of the surfline. The 5 Nations rights-based communal sale fishery April 1 to July 14, Chinook non-retention seaward of a boundary line 1nm from the surfline in portions of Areas 124, 125, and 126. July 15 to July 31, 80 cm maximum size limit for Chinook caught seaward of a boundary line 1nm from the surfline in portions of Areas 124, 125, and 126. (additional actions implemented in response to Big Bar rockslide)
Lower Fraser	 January 1 to July 14, very limited priority access for ceremonial purposes was considered. After July 14, limited communal access consistent with fishery objectives for stocks of concern. Fisheries primarily in August to target Summer 41 Chinook.
BC Interior - d/s of Thompson Confluence	 January 1 to July 14, restricted to unplanned events/First Fish ceremonies. Time or gear restrictions. July 15 to August 10, managed to limit overall Chinook impacts on endangered Chinook. After August 10 limited selective Chinook fishing or bycatch during Sockeyedirected opportunities. Later in August, targeted Chinook fishing or bycatch during Sockeye-directed fishing. Low-impact terminal harvests.
BC Interior - u/s of Thompson Confluence Note: the only Chinook in the area are Spring 5 ₂ and Summer 5 ₂ Chinook.	 Fisheries in the area constrained by preferred gear type or fishing times. Very low catches in these fisheries. Discussions occurred to reduce overall catch.

^{*}Management measures in 2019 were proposed to start April 1st but were implemented April 19th following the Ministerial decision.

