

## The Pacific Marine Conservation Caucus’s Recommendations for the 2019/20 North and South Coast salmon IFMPs

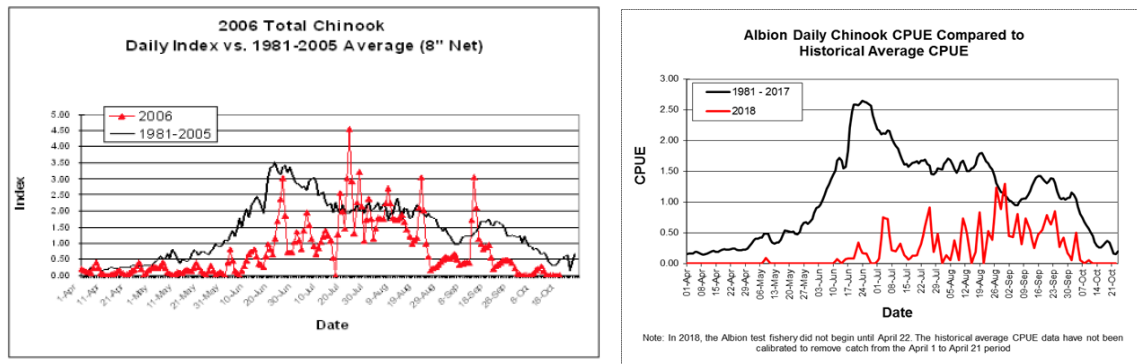
### CHINOOK ONLY

#### Fraser River Chinook

The Pacific Marine Conservation Caucus’s (MCC) notes the actions the Minister took in 2018 to reduce the total mortalities of Fraser Chinook by 25-35% failed. They did not achieve the proposed reductions. They did not lead to an increase in escapements. They did not protect the many south and north/central coast populations seeing rapid changes in abundance, productivity, size-at-age, and sex ratios. And they did not contribute to the recovery of SRKWs.

The actions in 2018 also did not incorporate climate induced changes to Fraser chinook freshwater habitat, migration success, and fishery related incidental mortality (FRIM).

#### Changes in Fraser Chinook Abundance and Timing: 2006 and 2017



The 2018 actions reflected DFO’s desire to maintain fisheries in the face of declining abundance and productivity. This was there only one success: Fisheries proceeded at the expense of conservation.

***The MCC recommends that instead of guessing at the level of reduction in total mortalities that might allow chinook populations to persist and recreational and commercial fisheries continue, the Department’s priority should be CU rebuilding. Total mortalities on at-risk, endangered and threatened Fraser River chinook should be reduced to between 0 and 10%.***

***Such actions would be consistent with the actions implemented by Minister Anderson in the mid 1990's in response to a similar coho crisis.***

**Southern BC Chinook CUs in the Critical Zone**

Table 1. Chinook Conservation Units (CU) in southern BC. CU status of 35 CUs was examined under the Wild Salmon Policy and by COSEWIC. Eleven south coast CUs could not be assessed under the WSP due to the unknown component of hatchery origin salmon. A further 9 could not be evaluated under the WSP due to the lack of data. A 2018 COSEWIC assessment of 12 CUs of Inner South Coast and Fraser River watershed found 8 CUs endangered, 4 threatened, 2 data deficient and 1 of special concern.

Region	CU Name	WSP Status	COSEWIC status
Columbia River	Okanagan	RED	Endangered
Lower Mainland	Boundary Bay	TBD	Not assessed
Fraser River	Lower Fraser spring -stream	TBD	Special Concern
Fraser River	Lower Fraser Fall -ocean	GREEN	Threatened
Fraser River	Lower Fraser Upper Pitt -Summer	Data Deficient	Endangered
Fraser River	Lower Fraser Summer -stream	DD	Threatened
Fraser River	Maria Slough Summer	TBD	Not Assessed
Fraser River	Middle Fraser Canyon - spring	DD	Not assessed
Fraser River	Middle Fraser Portage Fall- stream	RED	Endangered
Fraser River	Middle Fraser spring -stream	RED	Threatened
Fraser River	Middle Fraser River Summer	AMBER	Threatened
Fraser River	Upper Fraser spring	RED	Endangered
Fraser River	South Thompson Summer 0.3	GREEN	Not at Risk
Fraser River	South Thompson Summer 1.3	RED/AMBER	Not Assessed
Fraser River	Shuswap River Summer 0.3	TBD	Not Assessed
Fraser River	South Thompson -Bessette Summer 1.2	RED	Endangered
Fraser River	Lower Thompson Spring 1.2	RED	Not Assessed
Fraser River	North Thompson Spring 1.3	RED	Endangered

Fraser River	North Thompson summer 1.3	RED	Endangered
Fraser River	Upper Adams River	DD	Not Assessed
Fraser River	Fraser Harrison transplant Fall	TBD	Not Assessed
Inner South Coast	South Mainland -Georgia Strait Fall	DD	Not Assessed
Inner South Coast	East VI - Goldstream Fall	TBD	Not Assessed
Inner South Coast	East VI -Cowichan & Kosilah Fall	TBD	Not Assessed
Inner South Coast	East VI Nanaimo -spring	DD	Endangered
Inner South Coast	East VI -Nanaimo & Chemainus Fall	TBD	Not Assessed
Inner South Coast	East VI -Qualicum & Puntledge Fall	TBD	Not Assessed
Inner South Coast	South Mainland -Southern Fjords Fall	DD	Not Assessed
Inner South Coast	East VI-North Fall	RED	Not Assessed
Inner South Coast	Homathko summer	DD	Data Deficient
Inner South Coast	klinaklini Summer 1.3	DD	Data Deficient
Inner South Coast	East VI- Georgia Strait summer	TBD	Not Assessed
WCVI	WCVI -South Fall	RED	Not Assessed
WCVI	WCVI -Nootka & Kyuquot Fall	RED	Not Assessed
WCVI	WCVI -North Fall	TBD	Not Assessed

Minimizing directed fishing impacts on these populations is the first step in any rebuilding program. The next step would be to honour the Allocation Policy and address the Section 35-1 priority wherever possible.

This policy would likely require chinook non-retention in many mixed-stock recreational fisheries. However, neither DFO nor the recreational fishery has the necessary fishery independent catch/encounter reporting and compliance monitoring programs in place to ensure a fishery stays under its assigned ceiling. Further, DFO does not have a plan in place to shut down recreational salmon fisheries when a fisheries ceiling for total mortalities has been reached. And finally, no fishery manager, to our knowledge, has evaluated key recreational

chinook fisheries relative to the guidance in the recent CSAS SAR on fisheries related incidental mortalities. (*Guidance to Derive and Update Fishing-Related Incidental Mortality Rates for Pacific Salmon*. Patterson et al, 2017 <http://waves-vagues.dfo-mpo.gc.ca/Library/40602758.pdf>)

***The MCC recommends that non-retention of Chinook in recreational fisheries be implemented in times and areas where chinook populations of concern are present and these areas should remain closed until:***

1. *Fishery independent catch reporting and monitoring programs are in place*
2. *There is commitment to close fisheries once ceilings have been reached*
3. *Recreational fisheries encountering chinook populations of concern are evaluated relative to the CSAS SAR on FRIM and this is incorporated in any management actions*

A similar approach should be taken with commercial fisheries, including the Area F fishery. DFO's approach to protect WCVI populations in this fishery provides an example of how to incorporate such a population specific ceiling in a commercial fishery.

### **North Coast Chinook**

The MCC is concerned that DFO response on the North Coast has been to focus on Nass and Skeena Chinook, while ignoring Area 5 and 6 issues, and broader, coast wide productivity declines. DFO has also reported it did not achieve a 25-35% reduction in chinook harvests in 2018.

***The MCC believes the conservation burden should be equally shared across all sport (marine and freshwater) and commercial Chinook fisheries, and that priority should to be given to constitutionally protected First Nations food fisheries. To achieve the 25-35% reduction in chinook harvest in 2019 will require further reductions in recreational and commercial fisheries if FSC harvests are similar to what they were in 2018.***

### **Measures for Southern Resident killer whales**

Southern Resident killer whales (SRKW) are recognized as endangered under Canada's Species at Risk Act. A June 2018 decision by the federal government further concluded these whales face imminent threats to their survival and recovery. In December 2018 Ministers Wilkinson (DFO) and McKenna (ECCC) recommended to cabinet that emergency measures be implemented to aid SRKW recovery.

Chinook salmon are a critical food and primary prey for SRKWs, especially during the spring and summer (Ford and Ellis 2006, Ford et al. 2010, Hansen et al. 2010). Chinook abundance is correlated with SRKW fecundity, survival and mortality and is considered a major driver of

SRKW dynamics (Ward et al. 2009, Ford et al. 2010, Vélez-Espino et al. 2014, Wasser et al. 2017). The only study to evaluate the importance of Chinook relative to other threats of noise, disturbance, and contaminant found Chinook availability to be the primary factor limiting their recovery (Lacy et al. 2017).

The deaths of three SRKW in 2018 (L92, J50 and J35's calf) all occurred after DFO's June 2018 imminent threat decision and after the 2018 IFMP was in place. These events underscore the precarious nature of this population which is failing to successfully feed, grow and reproduce, and maintain survival of existing whales. Reproductive potential is eroded with every death regardless of sex and age (due to the cultural importance of females and the concern for inbreeding). All measures to ensure successful pregnancies and survival of new calves must be maximized in 2019.

The MCC makes the following recommendations for the 2019 IFMP.

- Priority feeding areas closed to fin fishing must be implemented within critical habitat for the Juan de Fuca, Boundary Pass, Gulf Islands and Fraser approaches to reduce disturbance and competition. These Areas include 121/21, Juan de Fuca to Sooke (20-1 to 20-5), Mouth of Fraser 29-3, 29-4, 29-6, 29-7, 29-9, 29-10, 29-12, and Gulf Island Subareas 18-2, 18-4 and 18-9
- Mixed stock commercial and recreational Chinook fisheries on South migrating Chinook stocks to WCVI, Inner South Coast and the Fraser must be reduced to less than 10% mortality and in the case of Early Fraser, less than 3%. Terminal fisheries (such as the Alberni Inlet) that have spawners in excess of the escapement goals can be executed terminally if abundance permits.
- Funding for enforcement and monitoring of all fishery measures related to these areas and fisheries

These recommendations for coast-wide Chinook and vessel management are consistent with the 'immediate' actions recommended in the 2017 Science Review to address lack of Chinook, vessel noise, disturbance, and competition and DFO's 2018 decision on imminent threat. These actions are designed to increase Chinook abundance to, and accessibility within, habitat identified as critical to SRKWs.