

CYER Workgroup Letter to Management Entities

March 11, 2020

Dear Ms. Reid:

The negotiations leading to the 2019 updates to Chapter 3 (Chinook salmon) of the Pacific Salmon Treaty (Treaty) reinforced our recognition that a collaborative approach is essential to successful management of Chinook salmon fisheries and Treaty implementation. An example is a new provision of the Treaty related to monitoring the performance of Individual Stock-Based Management (ISBM) fishery regimes. We are writing to request your assistance in implementing improvements in the coastwide coded-wire tag (CWT) program necessary to effectively implement this provision of Chapter 3.

The 2019 update to Chapter 3 of the Treaty includes new provisions to clarify and improve performance monitoring of the ISBM fishery regimes. Paragraph 5(a) of Chapter 3 establishes limits on the total adult equivalent mortality for the CWT indicator stocks identified in Attachment I and, if performance criteria are not met, paragraph 7(c) requires management entities to identify the fishery management actions that will be taken in future years to meet the criteria. These provisions increase the necessity that our coastwide CWT system provides management entities the information needed for Treaty implementation.

In November 20, 2018, the Pacific Salmon Commission (Commission) requested the assistance of management entities in completing a questionnaire to identify any gaps in our CWT and associated stock assessment programs. We appreciated the time invested by management entities to provide a detailed and thorough response. The result was an unparalleled, coastwide, comprehensive assessment of the strengths and weaknesses of our CWT system.

The results from the questionnaire were generally encouraging and reflected the management entities ongoing commitment to maintain and improve the coastwide CWT system. In addition, the \$7.5 million invested by each Party in the Coded-Wire Tag Improvement program under the previous Chinook Chapter filled some key gaps and provided a strong foundation to implement the Treaty in 2019-2028.

However, the questionnaire also revealed some notable gaps that could create challenges to implementing the ISBM provisions. Upon receiving a briefing on the results from the questionnaire, the Commission tasked a bilateral workgroup with identifying opportunities for collaboration to address the identified data gaps.

The CWT indicator stocks used for monitoring the performance of the ISBM fisheries of both Parties were one topic where collaborative efforts were identified as particularly advantageous. Bilateral technical analysis indicates that the number of recoveries of CWTs from some indicator stocks will result in estimates of exploitation rates in ISBM fisheries that are of poor precision. The potential consequence is that provisions of paragraph 7(c) may be invoked despite management of an ISBM fishery in a manner consistent with Treaty obligations. To avoid this, we ask that the management entities responsible consider increasing tagging to at least the recommended target in Table 1.

Table 1. Current and recommended tagging levels for CWT indicator stocks used to monitor the performance of ISBM fisheries of both Parties.

CWT Indicator Stock	Current Tagging Level	Recommended Target
Cowichan Fall	500,000	No Change
Harrison Fall Stock (Chehalis)	250,000	No Change
Nicola River Spring	180,000	379,000
Nooksack Spring Fingerling	200,000	No Change
Skagit Spring Fingerling	277,500	No Change
Skagit Summer Fingerling	200,000	304,000
Skykomish Fall Fingerling	340,000	372,000
Stillaguamish Fingerling	220,000	275,000

We recognize that an increase in tagging levels may be constrained, at least in the short term, by funding, existing facilities, biological constraints, legal requirements, or other factors. Where these constraints exist, we would be interested in learning how the Commission or the Endowment Funds might provide assistance that could lead to an increased tagging level and/or fishery and escapement sampling rates. We also recognize that additional changes in target tagging or sampling rates may be necessary in the future to account for changes in marine survival and fishery exploitation rates.

An increase in fishery sampling rates is a second strategy that can be used to increase CWT recoveries. The bilateral technical team found that many fisheries are currently sampled at a rate less than the coastwide standard of 20%. We encourage all management entities to review the sample rates in Attachment A and identify and implement short- and long-term actions to increase sample rates in these fisheries. Ensuring consistent achievement of the sampling rate standard in all fisheries is important because the new metric for monitoring of ISBM fishery impacts is based on the mortality distribution in both ISBM and AABM (Aggregate Abundance Based-Management) fishery regimes.

Even when the coastwide standard of 20% is achieved, increasing the sample rate in fisheries and time periods when multiple indicator stocks with insufficient recoveries are present would improve the accuracy and precision of the metric and better inform subsequent determinations by the Commission. Examples include the Washington troll fishery in areas 3 and 4 during the months of May and June, and the BC Juan de Fuca Strait sport fishery in the months of June through August.

Once again, I would like to thank you for your assistance in completing the questionnaire and in continuing our collaborative implementation of the Pacific Salmon Treaty.

Sincerely,



Phil Anderson
Chair



Rebecca Reid
Vice Chair

Attachment A. Fisheries used in Chinook Technical Committee analysis of ISBM obligations of the PST with an average sample rate of less than 20% in the years 2013 through 2017.

Chinook Technical Committee Fishery Aggregate	Month	Sample Rate
Georgia Strait Freshwater Net	8	0.12
Georgia Strait Freshwater Net	9	0.19
Lower Fraser Freshwater Net	5	0.05
Lower Fraser Freshwater Net	6	0.04
Lower Fraser Freshwater Net	7	0.09
Lower Fraser Freshwater Net	8	0.05
Lower Fraser Freshwater Net	10	0.08
NBC ISBM Sport	2	0.13
NBC ISBM Sport	6	0.18
Johnstone Strait Sport	6	0.17
North Georgia Strait Sport	2	0.17
North Georgia Strait Sport	4	0.18
North Georgia Strait Sport	8	0.16
North Georgia Strait Sport	9	0.16
North Georgia Strait Sport	11	0.19
South Georgia Strait Sport	1	0.15
South Georgia Strait Sport	2	0.17
South Georgia Strait Sport	4	0.11
South Georgia Strait Sport	5	0.15
South Georgia Strait Sport	8	0.12
South Georgia Strait Sport	9	0.07
South Georgia Strait Sport	10	0.13
South Georgia Strait Sport	11	0.14
South Georgia Strait Sport	12	0.14
WCVI ISBM Sport	7	0.18
Fraser Freshwater Sport	9	0.14
Canadian Juan De Fuca Sport	1	0.10
Canadian Juan De Fuca Sport	2	0.10
Canadian Juan De Fuca Sport	3	0.10
Canadian Juan De Fuca Sport	4	0.10
Canadian Juan De Fuca Sport	5	0.08
Canadian Juan De Fuca Sport	6	0.13
Canadian Juan De Fuca Sport	7	0.14
Canadian Juan De Fuca Sport	8	0.12
Canadian Juan De Fuca Sport	9	0.09
Canadian Juan De Fuca Sport	10	0.13
Canadian Juan De Fuca Sport	11	0.10
Canadian Juan De Fuca Sport	12	0.11
OR Troll	6	0.18
PGSD Sport	9	0.14
PGSD Sport	11	0.19
PGSD Sport	12	0.19
WA Net	9	0.16