



North Pacific Fishery Management Council

Simon Kinneen, Chair | David Witherell, Executive Director
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June 24, 2019

Mr. Jack Reakoff, Chair
Western Interior Alaska Subsistence Regional Advisory Council
c/o Office of Subsistence Management
1011 East Tudor Road MS 121
Anchorage, Alaska 99503-6199

Dear Mr. Reakoff:

Thank you for your letter of May 23, 2019 to the North Pacific Fishery Management Council (Council) for our June Council meeting action on Salmon bycatch. Your letter made several requests for the Council to consider with respect to salmon bycatch issues. I have addressed them below in the order in which you listed them in your letter.

- 1) Genetic testing of salmon bycatch in the Bering Sea Aleutian Islands and Gulf of Alaska trawl fisheries

Your letter noted some timing issues with the Council receiving genetics reports on salmon bycatch. The Council annually receives stock of origin reports from geneticists at the NOAA Auke Bay Laboratory (ABL). For several reasons these results are currently lagged by one year. The Council has previously requested that consideration be given to expediting the results of these analyses. The Council recently sponsored a salmon bycatch workshop at the Alaska Fisheries Science Center (AFSC) to discuss and provide recommendations on a range of issues related to salmon bycatch and genetic analyses. The workshop report is attached as well as the Council's motion on this item from our June 2019 agenda item. One of the recommendations relates to increased technological capacity building at ABL and gaining efficiencies in processing of genetic samples. We encourage the ABL to continue to improve their capacity to more expeditiously process samples and provide genetic results to the Council on an annual basis.

The letter also mentions the request for 'an analysis for the genetic information from the BSAI and GOA (bycatch) to determine to what extent Kuskokwim and Yukon stocks are being intercepted.' Staff from the National Marine Fisheries Service (NMFS) and the Council have developed an adult equivalency (AEQ) model to assess the impacts of the Bering Sea pollock fishery bycatch on stocks returning to western Alaska. Presently the genetic differentiation amongst the Coastal Western Alaska grouping in the baseline is insufficient to delineate Yukon and Kuskokwim stocks due to their genetic similarity (please see attached flyer for additional information on stock groupings and AEQ results). On-going work continues for modifying the current Chinook baseline which may lead to finer scale differentiation amongst western Alaskan stocks. In the meantime, the Council has recommended on-going effort to improve the AEQ model for the Bering Sea bycatch impacts and to update it with new age and maturity data when these become available. The Council also encourages a similar model be developed for the GOA to assess the impact on Western Alaskan stocks of bycatch from the GOA trawl fisheries.

- 2) In-river Chinook salmon harvest restrictions and NOAA National Standard 8.

The letter requests additional protections for Chinook salmon in the marine environment ‘through a combination of better harvesting technology and less trawling’. The pollock industry continues to develop salmon excluders and other bycatch reduction techniques to improve the efficacy of excluder devices to allow Chinook to escape a trawl net. Currently the EBS pollock fishery participants are mandated to use excluders when fishing. There are also several other management provisions which have been developed to reduce and avoid salmon bycatch at all levels of encounters. These include prohibitions on fishing in times of higher encounter rates, restrictions on vessels with higher bycatch, and mandatory area closures in areas of persistent high bycatch. All of these measures have contributed to reduced Chinook bycatch in the pollock fishery in recent years.

3) Hatchery fish impacts on wild salmon stocks.

Your letter requests an ‘evaluation of the effects of hatchery fish production on wild salmon stocks in the marine environment’. Some discussion of the ability to characterize hatchery fish was held in conjunction with the Council’s Salmon Bycatch Workshop and is reflected in the meeting recommendations. It is outside of the scope of the Council to initiate research on the impact of hatchery production in the Pacific Northwest and Alaska on the carrying capacity of salmon in the marine environment. However, scientists from numerous academic and research institutions including the North Pacific Anadromous Fish Commission, AFSC and the University of Washington have published many articles on the impact of hatcheries on the carrying capacity for salmon in the Pacific Ocean and continued research is on-going to further elucidate this. At the American Fisheries Society (AFS) annual meeting in Reno, NV in October 2019, a special session will be held specific to ‘The Science of Pacific Salmon Conservation: Foundations, Myths and Emerging Insights’. This symposium brings together a wide range of experts across salmon management and issues related to oceanic carrying capacity and should provide valuable insight into the status of the science and relevant research.

As always, our staff are available to provide additional information to the Regional Subsistence Advisory Councils and we thank you for your continued interest in salmon bycatch and your comments to the Council.

Sincerely,



David Witherell
Executive Director

Enclosure(s): Council motion from June 2019; April 2019 Salmon Bycatch Workshop Minutes; NPFMC Salmon Bycatch Flyer