



March 6, 2019

Mr. Phil Anderson, Chair  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220-1384

Dear Chair Anderson:

This letter supplements our annual guidance letter, dated March 5, 2019, on developing the Pacific Fishery Management Council's (Council) recommendations for the 2019 ocean salmon fisheries. This letter specifically addresses NOAA's National Marine Fisheries Service (NMFS) guidance related to effects of these fisheries on endangered Southern Resident killer whales (SRKW).

### ***Background***

SRKW are listed as endangered under the ESA. Over the last decade, the population has declined from 87 whales down to an historical low of 74 whales, and future projections under status quo conditions suggest a continued decline over the next 50 years (NMFS 2016). SRKW are one of eight species identified in NMFS' "Species in the Spotlight" initiative because it is at high risk of extinction. We are taking many actions to conserve and recover SRKW<sup>1</sup> and particularly to address the three main threats to the whales: prey limitation, vessel traffic and noise, and chemical contaminants.

Chinook salmon, the whales' primary prey, are important to SRKW survival and recovery. Any activities that affect the abundance of Chinook salmon available to SRKW have the potential to impact the survival and population growth of the whales. Fisheries can reduce the prey available to the whales and in some cases can interfere directly with their feeding. Insufficient prey can impact their energetics (causing them to search more for fewer prey), health (decreasing their body condition), and reproduction (reducing fecundity and calf survival).

NMFS consulted on the effects of Council fisheries under the ESA in 2009 and concluded that Council fisheries did not jeopardize the survival and recovery of SRKW. Since the 2009 consultation was completed, a substantial amount of new information is available on SRKW and their prey. Therefore, NMFS will re-initiate ESA consultation on the Council fisheries in 2019. NMFS would like to work with the Council to reassess the effects of Council fisheries on SRKW in light of this new information and as needed to develop a long-term approach that ensures these fisheries appropriately limit any adverse effects on SRKW. We anticipate that developing such a long-term approach will take some time, thus we do not anticipate that it will be available for 2019 fisheries. However, we are interested in establishing firm plans for this work as soon as possible, as discussed in more detail below.

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<sup>1</sup> More information about conservation and recovery actions can be found in our SRKW Species in the Spotlight Priority Action Plan (<https://www.fisheries.noaa.gov/species/killer-whale#spotlight>) and in our ESA recovery plan for SRKW ([https://www.westcoast.fisheries.noaa.gov/protected\\_species/marine\\_mammals/killer\\_whale/index.html](https://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/index.html))



## *Ongoing research and analysis*

SRKW consume Chinook salmon from a variety of runs throughout the year. In 2018, NMFS worked with the Washington Department of Fish and Wildlife (WDFW) and other partners to develop a framework to identify Chinook salmon stocks that are important to SRKW to assist in prioritizing actions to increase critical prey for the whales<sup>2</sup>. The framework gives extra weight to salmon runs that have high overlap spatially and temporally with SRKW, and have been documented as part of their diet, especially during winter when the whales may have a harder time finding sufficient food. Several of the high priority Chinook salmon stocks currently identified in the framework contribute substantially to Council fisheries, including **lower Columbia River, Sacramento River, and Klamath River fall-run Chinook salmon stocks**. Identifying high priority Chinook salmon stocks for SRKW is an important step to assess impacts and prioritize management and recovery actions that will benefit the whales. As we continue to gather additional information to refine and update this framework, we welcome Council input.

Additionally, NMFS is working on a risk assessment that comprehensively analyzes the effects of salmon fisheries on the availability of SRKW prey throughout their geographic range and identifies conditions that may pose a risk to recovery of the whales. This comprehensive risk assessment describes the spatial and temporal overlap of each fishery with the whales, uses a retrospective analysis to assess the impacts of salmon fisheries on the total prey available in the past (including the last decade of decline for the whales), and assesses potential impacts to future prey availability for a variety of fisheries management regimes on the West Coast. In conjunction with the risk assessment, NMFS is developing an adaptive management framework that could help inform fisheries management regarding conditions that pose a risk to the recovery of the whales. If adjustments are needed, this framework could guide fisheries actions to limit impacts to prey availability in specific areas and times that are believed to create the greatest benefit to the whales. We believe adaptive frameworks like this, or other equally protective tools, provide confidence that fisheries can respond to the highest risk conditions and help improve conditions for SRKW in the future. We are very interested in sharing and discussing these ideas with the Council.

NMFS continues to focus on understanding the whales' migration patterns, feeding habits, health conditions, and preference for Chinook salmon as prey so that we can develop and prioritize strategies to increase abundance and availability of Chinook salmon to support SRKW recovery.

In addition to considering impacts to SRKW from fishing, we are also working closely with partners to reduce vessel disturbance and interference with foraging, so that the Chinook salmon are more accessible to the whales. Working with a variety of partners, we are implementing actions identified in our review of our existing vessel regulations<sup>3</sup> to improve compliance with these regulations, improve habitat conditions for the whales, and implement actions recommended through the Governor of Washington's Task Force process. For more information about SRKW conservation and recovery actions underway, please refer to NMFS' West Coast Region website.<sup>1</sup>

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<sup>2</sup> [https://www.westcoast.fisheries.noaa.gov/stories/2018/18\\_07182018\\_prioritized\\_salmon\\_stocks\\_for\\_srkw\\_recovery.html](https://www.westcoast.fisheries.noaa.gov/stories/2018/18_07182018_prioritized_salmon_stocks_for_srkw_recovery.html)

<sup>3</sup> Ferrara, G.A., T.M. Mongillo, L.M. Barre. 2017. Reducing disturbance from vessels to Southern Resident killer whales: Assessing the effectiveness of the 2011 federal regulations in advancing recovery goals. NOAA Tech. Memo. NMFS-OPR-58, 76 p. [https://www.westcoast.fisheries.noaa.gov/publications/protected\\_species/marine\\_mammals/killer\\_whales/noaa\\_techmemo\\_nmfsopr-58\\_dec2017.pdf](https://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/killer_whales/noaa_techmemo_nmfsopr-58_dec2017.pdf)

## ***2019 Pre-Season Ocean Salmon Fisheries Management Process***

NMFS is currently evaluating recently available information about 2019 Chinook salmon abundance projections for the ocean and Puget Sound. We are looking at this information in conjunction with the best available information on which salmon stocks contribute most to the SRKW diet (see 2018 framework referenced above). As noted, there are at least three stocks included in the priority prey stock framework that are caught in substantial numbers in Council area fisheries: **Lower Columbia River, Sacramento River, and Klamath River fall-run Chinook salmon**. We would like the Council's participation between now and the April meeting to help us understand the potential impact of proposed Council fisheries on the draft priority SRKW prey stocks.

### ***Work towards long-term approach and biological opinion***

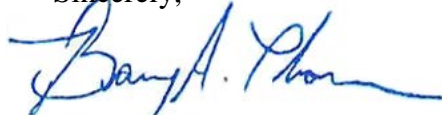
We would like to work collaboratively with the Council and its advisory bodies to reassess the effects of the Council-area fisheries on SRKW and to develop a long-term approach to address any identified effects as soon as practicable. We expect this collaborative process will include consideration of management tools, e.g. possibly an adaptive framework similar to that described previously, that under high risk conditions would trigger action that could reduce impacts on prey in a meaningful way. The goal is to help ensure that Council's harvest management is responsive to the status of SRKW and supports recovery to the extent necessary.

We also recommend that the Council consider scheduling a discussion about developing this collaborative process under its Future Agenda Planning agenda item at the March meeting, with time for discussion during the April meeting. We believe an ad hoc workgroup similar to those formed to assess effects and develop approaches for managing impacts to ESA-listed salmon stocks would be beneficial. NMFS would provide experts on SRKW and salmon fisheries to be part of the effort. We also suggest involving interested fishery participants and non-governmental organizations. A small technical workgroup at the direction of NMFS and the Council would be responsible for conducting the work and reporting back to the Council on progress and to receive additional guidance. We recommend beginning scoping the process, participants, and schedule at the April Council meeting.

The NMFS West Coast Region looks forward to working with the Council to develop 2019 ocean salmon fisheries consistent with the conservation and management objectives of the Pacific Coast Salmon Fishery Management Plan, the Magnuson-Stevens Fishery Management and Conservation Act, and the ESA. We are committed to working with the Council to address the issues outlined in this letter.

If you have questions, please contact Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries, at 916-930-3733 or [Ryan.Wulff@noaa.gov](mailto:Ryan.Wulff@noaa.gov).

Sincerely,



Barry A. Thom  
Regional Administrator

cc: Chuck Tracy, Executive Director, Pacific Fishery Management Council  
Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries, NMFS WCR