



March 20, 2023

Submitted via the portal at [pcouncil.org](http://pcouncil.org)

Mr. Marc Gorelnik, Chair Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101 Portland, OR 97220

Mr. Scott Rumsey, Ph.D., Regional Administrator (Acting) NOAA  
Fisheries West Coast

1201 NE Lloyd Blvd., Suite 1100 Portland, OR 97232

Dear Chair Gorelnik and Council Members, Administrator Rumsey,  
RE: April 2023 Council Meeting, Agenda Item E10: Salmon Management  
Measures

Thank you for the opportunity to comment.

With three deaths and only one new calf in the Southern Resident killer whale (SRKW) population over the past 12 months, the population remains at 73—down from 88 individuals when the population was listed as endangered in 2005. While a number of females have been pregnant in recent years, their calves are not surviving until birth. It is imperative that sufficient Chinook salmon be available to support healthy pregnancies, as fecal studies show a 69% pregnancy failure rate when seasonal Chinook salmon abundance is low.

Therefore, it is of great concern that the pre-season forecast is too high to trigger Amendment 21—and offer additional management measures to make more Chinook salmon available as prey—yet high enough that the total allowable catch is greater than last season.

By all the measures of ecosystem health—including these whales who act as sentinel species—this is not the time to increase the catch. These whales (as the original fishers of Chinook salmon, co-evolving over centuries to be dietary Chinook specialists), like fishers, rely on the largest and fattiest Chinook, yet these are the ESUs in the most danger of extinction.

A recent study by scientists at the University of British Columbia (UBC) analyzed the [lipid content](#) of multiple Chinook runs in the Fraser River. They found that those with the highest energy density migrate the furthest and spawn at higher elevations and proposed this is also likely true of Columbia Spring Chinook salmon ESUs. The decline of these lipid-rich fish forces the whales to expend energy, foraging more frequently to locate and capture higher quantities of lower-quality Chinook salmon, including hatchery-raised. UBC estimated this could require an additional 80,000 Chinook salmon. Yet the whales receive no allocation.

A new SRKW [population viability model](#), developed since Amendment 21 was adopted, clearly demonstrates a more rapid path to biological extinction. Now a [recent study](#) out of UBC reveals the presence of PFAS, also known as “*forever chemicals*,” present in the tissues of these endangered whales, many known to impact fertility and birthing success. When the whales are malnourished, harmful chemicals otherwise stored in their blubber become *mobile*, entering the bloodstream. Pregnant and nursing females transfer this toxic load to their calves. Increasing Chinook prey availability would help mitigate these effects, as transient or Bigg’s killer whale calves are thriving, despite their mothers’ contaminant loads being higher, given their mammalian prey is higher up the food web, and so increasing the effects of biomagnification.

In addition to adopting Alternative 3, the lowest catch limit, we ask that you apply additional measures to all west coast fisheries this year to reduce the overall Chinook salmon catch outside terminal areas to increase foraging opportunities available to the Southern Resident killer whales this season.

Thank you.

Deborah A. Giles, Ph.D.



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