Date: November 9, 2020  
To: Pacific Council Ad Hoc Southern Resident Killer Whale Workgroup, Pacific Fishery Management Council  
From: Earth Law Center  
Re: Comments on salmon management/conservation measures

Earth Law Center (ELC) respectfully submits these comments regarding the Southern Resident Killer Whales (SRKWs) and recommended actions for long-term recovery. We thank the Pacific Council for their active efforts to discuss any associated modeling and analysis needed to develop potential alternatives for salmon management/conservation measures for Pacific Council consideration.

Since joining the list of Endangered Species the SRKW numbers have continued to decline despite actions currently being taken and enforced to reduce noise pollution, water contaminants, and increase food availability. For the reasons described in this letter, we highly recommend that the Southern Resident Killer Whale be considered a stakeholder in these decisions, and allocations of salmon start with fulfilling the minimum energy requirements for the Southern Resident Killer Whale population.

About Earth Law Center

Earth Law Center is a 501(c)3 non-profit organization working to advance ecocentric laws and policies that protect and restore Nature to health. Western legal systems and society are largely anthropocentric, or human-centered, allowing unsustainable degradation and pollution for human benefit and utility. We must recognize that we are a part of the Salish Sea ecosystem, not separate from it, and ensure representation of its interests and needs in decisionmaking.

Recommendation:

1) Allocate the minimum number of salmon needed for the southern resident killer whale population first. The SRKWs struggle to survive largely due to insufficient wild Chinook salmon, their principal food source. Scientists have found connections between the mortality as well as the reproductive rates with the whales that directly corresponds to the amount of chinook in the water. Lacy et. al. research on evaluating anthropogenic threats to endangered killer whales to inform effective recovery plans, suggested that by increasing numbers by 15% and reducing undersea cacophony to half of what it is today, would result in a 2.3% annual increase in Orca populations. We must ensure there are enough salmon to meet the basic needs of the Southern Residents by allocating a share of the salmon catch to the SRKWs. One estimate shows that the population requires 662 daily catches of Chinook Salmon to maintain a healthy weight and optimal bodily functions. Another shows that a SRKW requires about 18-25 salmon (not necessarily all

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chinook) every single day, or about 1400 for the whole population, to meet basic needs.2 Therefore, harvest allocations should be created and adjusted based on this necessity.

2) **Create a position within the Pacific Council that is the acting guardian for the Salish Sea ecosystem.** The Council can ensure the interests and needs of the SRKWs are considered by instilling representation of the Salish Sea ecosystem through a designated Guardian in the Council. This makes it possible to ensure that the Orcas’ have a “seat at the table” and that their rights, interests, and needs are equally considered in policy and management decisions without undue influence of outside interests or self-interest. A ‘Guardian’ position within the Council would have the responsibility to protect the integrity and diversity of the SRKWs, and to defend the population from activities that may cause harm. Indigenous peoples and scientists of the Salish Sea are well suited for this task. Precedent for this recommendation already exists in the form of “trusteeship.” The United States Congress can authorize a “trustee” for nonhumans, with express power to take legal or administrative action to protect their beneficiaries. Current law does just that, requiring the President to designate those federal officials who are to act on the behalf of the public as trustees for “natural resources” that fall under federal sovereignty. Such is the case with NOAA and trusteeship over marine mammals.3

3) **Consider closures as viable alternatives and work towards emergency recovery efforts.** Recovery efforts that encompass a variety of short-term and long-term solutions will have the greatest impact on increasing chinook salmon populations. NOAA reported in 2019 that two populations of Chinook salmon are endangered, and seven are threatened under the Endangered Species Act.4 The numbers are continuing to dwindle this year at alarming rates, leaving scientists and human populations dependent on the salmon run extremely concerned. In August 2020, the Tsilhqot’in Nation of British Columbia closed all salmon fishing within their territory west of Williams Lake (including the Fraser River run) due to “extreme conservation concern.”5 They are also calling on Canada’s Minister of Fisheries and Oceans to issue an emergency order to close all sockeye fisheries on the Fraser River, noting the need to protect runs for future generations. Following their lead, we must apply the precautionary principle and consider short-term closures when necessary to ensure the survival of salmon populations and the SRKWs.

Additionally, recommendations made by the Council each season are largely based on the goal to “allow fishermen to harvest the maximum amount of salmon that will support the fishery while preventing overharvest.” The focus on the maximum has largely led to the continued decline in salmon populations, and quotas are historically placed higher than

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4 [https://www.fisheries.noaa.gov/species/chinook-salmon#:~:text=The%20status%20of%20Chinook%20salmon%20in,seven%20are%20listed%20as%20threatened%20under%20the%20ESA](https://www.fisheries.noaa.gov/species/chinook-salmon#:~:text=The%20status%20of%20Chinook%20salmon%20in,seven%20are%20listed%20as%20threatened%20under%20the%20ESA).
science suggests. Rather than focusing on mortality and aiming to prevent collapse, we must shift our approach towards maintaining healthy and thriving populations. We recommend determining fishing levels based on what allows not only the population but the broader ecosystem to “maintain normal form and function;” a level of health that is determined based on what the salmon and ecosystem needs to maintain it’s vital roles and cycles now and into the future.

Finally, the Pacific Council should include dam removal on the lower snake river as a restoration measure. In its 2000 Biological Opinion for operation of hydroelectric dams on the Columbia and Snake Rivers, NOAA Fisheries concluded: “breaching the four lower Snake River dams would provide more certainty of long-term survival and recovery [of chinook salmon] than would other measures.”6 Additionally, the US Army Corps of Engineers in its 2002 Environmental Impact Statement (EIS) identified dam breaching as the alternative that would provide the highest probability of meeting salmon survival and recovery criteria (see page 25).

4) **Respect Indigenous worldview, rights, and culture.** As highlighted above, Indigenous Peoples are leading the way and closing fishing activity in order to ensure future salmon runs are protected, despite relying on these runs for subsistence, livelihoods and cultural identity. Indigenous peoples of the Salish Sea have long held the Sea and its inhabitants as culturally and spiritually important to their livelihoods, and salmon is a key part of their economy and diet. For example, the Lhaq'temish people of the Lummi Nation are Indigenous peoples on the coast of northern Washington and southern British Columbia. The Lummi term for "orca" is "qwe'hol'mechen," which means "our relatives under the water." The Lummi and the qwe'hol'mechen have lived in community with one another since time immemorial and teachings indicate not only deep cultural and spiritual connections between qwe'hol'mechen and the Lummi people, but also kinship bonds. Additionally, the ?Esdilagh First Nation (one of the six that comprises the Tsilhqot’in Nation) enacted the Sturgeon River Law (also known as the Fraser River) that states the people, animals, fish, plants, the nen (“lands”), and the tu (“waters”) have rights.7

By not implementing the above three recommendations, and therefore ensuring the long-term survival of salmon populations, we are violating Indigenous peoples rights to life, health, traditions and culture. These rights are enshrined not only in our Constitution, and by Treaties made long ago between the federal government and tribes, but also the United Nations Declaration on the Rights of Indigenous Peoples.

In conclusion, we recommend the Pacific Council allocate a share of salmon harvest to the SRKWs. This allocation must be based on the best available science and on their basic needs for survival. Status quo fisheries management has not been enough to protect and restore not only

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7 http://www.tsilhqotin.ca/Portals/0/PDFs/Notices/2020%2005%2028%20Elhdaqox%20Dechen%20Tsedihtan%20Sturgeon%20River%20Law%2029.pdf
salmon populations, but the Southern Resident Killer Whale population. We must take proactive steps and responsibility to restore the entire ecosystem to health. This means aiming for higher, rather than merely preventing collapse, and taking precautionary steps to ensure long-term survival.

Please do not hesitate to contact me with any questions or concerns you may have.

Sincerely,

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