



*Connecting Whales and People  
in the Pacific Northwest*

April 13, 2020

D. Peter Helmlinger, P.E.  
Brigadier General  
U.S. Army  
Division Commander

Elliot Mainzer  
Administrator and CEO  
Bonneville Power Administration  
U.S. Department of Energy

Lorri Gray  
Regional Director, Columbia-Pacific Northwest  
Bureau of Reclamation  
U.S. Department of the Interior

Re: Columbia River System Operations – Draft Environmental Impact Statement

Dear U.S. Army Corps of Engineers, Bureau of Reclamation, and Bonneville Power Administration,

Thank you for the opportunity to comment on the Columbia River System Operation Draft Environmental Impact Statement (CRSO DEIS). Orca Network is a non-profit organization dedicated to raising awareness of the whales of the Pacific Northwest and the importance of providing them healthy and safe habitats. Our education and outreach efforts include over 15,000 subscribers to our Whale Sighting Network, 160,000 Facebook members, and over 25,000 annual visitors to our Langley Whale Center on Whidbey Island. We respectfully submit these comments on behalf of our staff and Board of Directors, and the endangered Southern Resident orcas.

We would first of all like to express our disappointment that the comment period was not extended beyond April 13<sup>th</sup>. At only 45 days, the time allotted for this comment period was not sufficient to fully read and understand a document of this magnitude. Given current events with the pandemic and the inability to host in-person public meetings, we felt that the public needed more time to read and digest this information and give it the attention it deserves so they could prepare educated and thoughtful comments.

We would also like to express our disappointment that the DEIS did not adequately represent the importance of Columbia Basin salmon to the endangered Southern Resident orcas, and it fails to recognize the biological need of Southern Residents to have continuous access to salmon from a variety of river systems throughout their range.

Southern Resident orcas are a genetically, acoustically, socially, and culturally distinct population of fish-eating orcas. They were listed as endangered under the U.S. Endangered Species Act in 2005 but are continuing to decline despite the protection and recovery actions initiated by this listing. In 2019 the population dropped to just 73 orcas, the lowest number in four decades<sup>1</sup>, and the Center for Whale Research announced in January that an adult male may be missing from L Pod. Their main threats include a lack of available prey, mainly due to a decline in their primary prey, Chinook salmon; environmental contaminants, particularly bio-accumulative organochlorines such as DDT, PBDEs, and PCBs; and vessel effects and sound, as well as increased potential for oil spills and disease.<sup>2</sup> Of these threats, lack of prey is widely recognized as the biggest limiting factor in their recovery. Salmon depletion has led to changes in their social structure, decrease in presence in their core summer feeding areas, an increase in stress hormones and a miscarriage rate of almost 70%.<sup>3</sup>

In the 2008 Recovery Plan for the Southern Resident Orcas, the National Marine Fisheries Service (NMFS) stated that “perhaps the single greatest change in food availability for resident killer whales since the late 1800s has been the decline of salmon in the Columbia River basin.” NMFS also stated that Columbia-Snake River Basin salmon has the largest potential for increasing Chinook salmon abundance throughout the Southern Residents’ range.<sup>4</sup> Yet the CSRO DEIS states that Puget Sound Chinook salmon stocks are more important to Southern Resident orcas than Snake River stocks due to their availability for greater periods of the year and also claims that “the food available to Southern Resident killer whales from the lower Snake River population is only a small portion of their overall diet. Changes to food availability may change the whale’s foraging behavior patterns slightly but will not change their overall condition or population dynamics.”<sup>5</sup>

We know from a variety of research and data sources that Southern Resident orcas spend over half the year in coastal waters and that Columbia basin salmon make up over half of their outer coastal diet. Photogrammetry studies show that the Southern Residents are experiencing a decline in body condition between October and May.<sup>6</sup> Data from sightings, acoustic recordings, satellite tagging, and prey and fecal samples show that they are traveling primarily in coastal habitat during this time, and that Chinook salmon continue to be their preferred prey in these waters, further underscoring the need for an abundant, healthy food source throughout their range.<sup>7</sup> Data from the National Oceanic and Atmospheric Administration (NOAA) compiled from satellite-tagging studies, dedicated surveys, and passive acoustic monitoring from hydrophones located in coastal waters shows that all three pods in the Southern Resident population use the coastal waters of Washington year-round, with the highest use occurring during the winter and early spring.<sup>8</sup> The data indicates that, of the total time the orcas spend in coastal habitat each year, approximately 50% of that time is spent off the coast of Washington, and NOAA has identified this as a high-use foraging area for the population.<sup>9</sup> The concentration of use of the waters between Grays Harbor and the mouth of the Columbia River appears to be driven by the timing of seasonal Chinook runs, and the Columbia and Snake River are listed as priority Chinook stocks for Southern Resident orcas.<sup>10</sup> We also know, as evidenced particularly in 2018 and 2019, that

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<sup>1</sup> Center for Whale Research Orca Survey data

<sup>2</sup> National Marine Fisheries Service. 2008. Recovery Plan for Southern Resident Killer Whales (*Orcinus orca*). National Marine Fisheries Service, Northwest Region, Seattle, Washington

<sup>3</sup> Data from the Center for Whale Research; Wasser S.K. et al. 2017. Population growth is limited by nutritional impacts on pregnancy success in endangered Southern Resident killer whales (*Orcinus orca*).

<sup>4</sup> NMFS (2008) Recovery Plan for Southern Resident Killer Whales (*Orcinus orca*),

<sup>5</sup> DEIS at 3-759, table 3-106.

<sup>6</sup> Fearnbach, H. *et al.* 2018. Using aerial photogrammetry to detect changes in body condition of endangered southern resident killer whales.

<sup>7</sup> National Marine Fisheries Service Biological Report, 2019. Proposed Revision of the Critical Habitat Designation for Southern Resident Killer Whales.

<sup>8</sup> Proposed Revision of the Critical Habitat Designation for Southern Resident Killer Whales: Draft Biological Report. National Marine Fisheries Service, September 2019. Available: <https://www.fisheries.noaa.gov/action/critical-habitat-southern-resident-killer-whale>

<sup>9</sup> Hanson, M.B., E.J. Ward, C.K. Emmons, and M.M. Holt. 2018. Modeling the occurrence of endangered killer whales near a U.S. Navy Training Range in Washington State using satellite-tag locations to improve acoustic detection data.

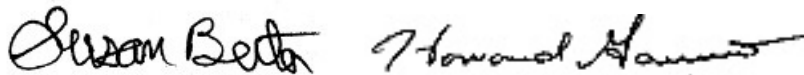
<sup>10</sup> NOAA Fisheries and Washington Department of Fish and Wildlife 2018. Southern Resident Killer Whale Priority Chinook Stocks Report.

Southern Residents will shift their patterns and feed off the coast during the summer when there is little to no salmon available in the Salish Sea, underscoring the importance of these coastal runs as Puget Sound and Fraser River stocks continue to decline or fail to improve.

Of the alternatives presented in the CRSO DEIS, MO3, Snake River dam breaching plus increased spill over the Columbia River dams, represents the best chance of recovery for Snake River salmon and for Southern Resident orcas. The benefits of dam breaching were demonstrated in a recent white paper entitled [Southern Resident Killer Whales & Columbia/Snake River Chinook: A Review Of The Available Scientific Evidence](#) which was written by five PhDs and submitted earlier this year.<sup>11</sup> We are concerned that the preferred alternative indicated in the DEIS is going to simply repeat the status quo and do little more than incorporate the interim agreement for increased spill. While this agreement is certainly a positive step for salmon, it is not enough to result in the salmon recovery needed for the survival of Southern Resident orcas, and to restore salmon and cultural resources that were lost to local tribes.

In 2018 Governor Inslee's Southern Resident orca task force recommended a stakeholder process to discuss potential breaching or removal of the lower Snake River dams. This process was recently completed and while the final report is not perfect, we do not want to see this time and effort wasted. We would like to see some of this information incorporated into a dam removal plan, and used to support stakeholders and make them whole as they transition to a free flowing Snake River that can continue to meet their needs as well as the needs of the Southern Resident orcas.

Sincerely,

Handwritten signatures of Susan Berta and Howard Garrett in black ink.

Susan Berta, Executive Director [susan@orcانetwork.org](mailto:susan@orcانetwork.org)

Howard Garrett, Board President [howard@orcانetwork.org](mailto:howard@orcانetwork.org)

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<sup>11</sup> Bain, Giles, Filardo, Schaller, and Williams. Southern Resident Killer Whales & Columbia/Snake River Chinook: A Review Of The Available Scientific Evidence. [2020](#).