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VIA U.S. REGISTERED MAIL

March 17, 2022

The Honorable Michael L. Connor
Office of the Assistant Secretary of the Army (Civil Works)
108 Army Pentagon, Room 3E446
Washington, D.C. 20310-0108

Dear Assistant Secretary Connor:

I am writing to share information with you about the four lower Snake River dams (Ice Harbor, Lower Monumental, Little Goose and Lower Granite) in eastern Washington. The lower Snake River dams, which have had a benefit-to-cost ratio well below 1, are responsible for placing endangered salmon, steelhead, and orcas at serious risk of extinction, violating tribal treaty rights, wasting taxpayer dollars, and impeding the Columbia and Snake River basins from adapting to climate change. Restoration of the lower Snake River basin is a key nature-based solution for rebuilding healthy environmental, economic, and tribal relationships in the region.

As a retired professional engineer (for 35 years) with USACE and former high level policy advisor in the USACE Headquarters, I respectfully submit that I am in a unique position to brief you on this critical matter. During the time I served as Deputy District Engineer for Program Management (DPM) at Walla Walla my responsibilities ranged from interfacing with elected officials on budget matters to reviewing complex engineering, economic costs and biological data and reports, and providing programmatic/project oversight of USACE's 700-person Walla Walla District. My projects included seven large dams on the Columbia, Snake and Clearwater rivers, as well as numerous flood control and environmental restoration projects in the entire Snake River basin.

I served as Deputy District Engineer during the development and decision-making process that resulted in the *Lower Snake River Juvenile Salmon Migration Final Feasibility Report and Environmental Impact Statement* (February 2002).[1] Since that time, USACE has known that

[1] Available at https://www.nww.usace.army.mil/Library/2002-LSR-Study/ ("Lower Snake River Dams FR/EIS").

breaching the four lower Snake River dams has the greatest potential to improve survival of Snake River salmon, including spring/summer and fall Chinook.[2]

I am also an elected Clallam County Public Utility District Commissioner and have served in that capacity since January 2019. I have done extensive research and exploration into the various trade groups, organizations and agencies that deal with power supply to the state of Washington and the Pacific Northwest region. In my capacity as a Commissioner, I am regularly briefed on, and am an active participant in, hydropower modeling, fish management strategies, and policies that relate to the future of the hydro system, in particular the lower Snake River dams.

I became re-engaged in the Snake River dam issues post-retirement upon moving to Port Angeles, Washington. I founded an organization called Dam Sense through which I, and other experts, have spent hundreds of thousands of volunteer hours analyzing government data and the latest scientific evidence regarding the lower Snake River dams.

The restoration of the Elwha River, near Port Angeles and running through the traditional territory of the lower Elwha Klallam people, shows what can be achieved when we retire under or non-performing hydro-projects and work to restore what were once vibrant ecosystems sustaining life since time immemorial.

I am proud of my career with USACE because I know that we tried our best to evaluate complex issues and make the right decisions. In this case, the right decision is to order breaching of the lower Snake River dams. I have attached a July 2021 proposal to the Biden Administration, signed by myself; Paulette Jordan (Coeur d'Alene Tribe, Save the American Salmon, Jordan Coalition, DNC Council on the Environment & Climate Crisis, Director of Native American Engagement); Chris Pinney (Senior Fisheries Biologist, Walla Walla District, US Army Corps (Retired)); and Ken Balcomb (Director, Center for Whale Research), summarizing the urgency along with the relative ease and low cost of breaching. I have also attached Declarations

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[2] As the National Oceanic and Atmospheric Administration (NOAA) stated in its 2000 Biological Opinion for salmon and steelhead on operation of the Federal Columbia River Power System (2000 BiOp): "breaching the four lower Snake River dams would provide more certainty of long-term survival and recovery than would other measures." 2000 BiOp at 9-5. The U.S. Fish and Wildlife Service reached the same conclusion in its 2002 Fish and Wildlife Coordination Act Report included in the Lower Snake River Dams FR/EIS: "It is clear in our assessment that the Dam Breaching alternative would provide many more benefits to fish and wildlife and their habitats than the other four alternatives in the area of the four lower Snake River dams. We believe this alternative would best increase survival of juvenile anadromous fish migrating through the area of the four lower Snake River dams. Additionally, it would significantly increase the area of spawning and rearing habitat for Snake River fall chinook, a threatened species. Furthermore, it is the only alternative that addresses restoration of near-natural riverine conditions, which would produce a myriad of positive influences on natural processes and fish and wildlife. Therefore, based on our biological evaluation of the five alternatives' effects on fish and wildlife resources, the USFWS concludes that the benefits to fish and wildlife from the Dam Breaching alternative exceed the benefits provided by the other alternatives." Lower Snake River Dams FR/EIS, App. M at M 11-1. As stated in the Lower Snake River Dams FR/EIS Summary, analysis showed that **breaching the dams had the highest probability of meeting the government's salmon survival and recovery criteria**, while employing **the other so-called "reasonable" alternatives would be slightly worse than doing nothing**. Nevertheless, the Corps implemented the "**slightly worse than doing nothing**" alternatives. Predictably, the ESA-listed runs are in worse shape today than in 2002 and another $600 million of Columbia River Fish Mitigation was wasted.

submitted by myself and Chris Pinney in the ongoing federal litigation (*National Wildlife Federation et al. v. NMFS et al.*, Case No. 3:01-cv-00640-SI (D. Or.)) challenging the Columbia River System Operations Environmental Impact Statement (CRSO-EIS) which expand on these issues.

That litigation is currently stayed pending stated efforts by the parties to work out a comprehensive solution regarding the Columbia River hydropower system. I have been advised that the negotiations include a serious discussion of breaching the dams. Washington's Governor Inslee and U.S. Senator Murray (D-WA) have also taken some steps in this direction. The problem, however, is twofold:

(1) If breaching is to occur in time to prevent the extinction of salmon, steelhead, and the Southern Resident Orcas, more immediate action is required. The situation calls for the type of decisive action only USACE is capable of undertaking. As we have learned from the past, the current dynamic will, unfortunately, only result in further studies and negotiations that do not translate into decisive action in time to prevent species extinction and help address violation of tribal treaty rights. Indeed, the ratepayer funded Pacific NW Power and Conservation Council may incorporate retirement of the lower Snake River dams into their high fidelity models, but have indicated it could take up to 27 months when in fact the input can be adjusted and the model run in a matter of days. A willful waste of time in the face of an emergency and millions more wasted on studies.

(2) There is considerable risk that any resolution currently being negotiated will perpetuate the erroneous position that USACE does *not* have the authority to place the dams in non-operational status and then take measures necessary to secure them by breaching via channel bypass (removing the dams earthen embankment per the dams' design). Such a position creates undesirable precedent in that it constricts the exercise of discretion USACE has always enjoyed in managing its projects. USACE's Northwestern Division would benefit from a headquarters directive that clarifies the scope of its discretion in this regard. Having previously briefed Brigadier General Scott Spellman (now the COE), D. Peter Helmlinger (former Commander of Northwestern Division) and Lt. Col. Christian N. Dietz (former Walla Walla District Commander) and staff, I can share that the Northwestern Division and Bonneville Power Administration (BPA) have a strong bias toward keeping the lower Snake River dams. This bias has led them to ignore data showing the near extinction levels of endangered salmon and the related impact on endangered Southern Resident Orcas. One commander after another has been ill informed by senior staff and attorneys at NWD and BPA.

If you make the decision to breach the Lower Granite and Little Goose dams today, breaching can be done in the in-water work window between December 2022 and March 15, 2023.[3]

[3] Due to a special cold water pump at Lower Granite, the fish ladders can still be made operational while breaching, thereby making breaching possible for that dam at any time of the year. The only additional need would be for installation of a slide down to the dropping reservoir level. The Lower Snake River Dams FR/EIS describes this process. *See* Lower Snake River Dams FR/EIS, Appendix D, Annex C, at D-C-3 and D-C-4. The process has also been further refined to reduce costs by hundreds of millions. *See* Breach Mitigation Plan & Cost available at https://damsense.org/wp-content/uploads/2020/12/Mitigation-Plan-2020.pdf.

Ninety-two percent of the cost of breaching must be funded by BPA, 100% if they do it as the cheapest way to prevent extinction and recover salmon. The net positive environmental benefit of quickly breaching 2 dams is to prevent the death of 4 million Chinook smolts.[4] This is the fastest way to honor tribal treaty rights, save the fishing industry and to deliver several hundred thousand adult salmon to the endangered Southern Resident Orcas.

I would very much appreciate the opportunity to have an in-person meeting with you to share USACE and other government data critical to this issue and to answer any questions you may have. I am confident that once you have taken the time to understand the facts, you will agree with the urgent need to start breaching the dams. I am also confident that you will competently navigate the pathway to swift action.

Thank you for your consideration.

Sincerely,

James Waddell

James Waddell, P. E.

Enclosures:

Proposal to Biden Administration
Declaration of James Waddell
Declaration of Chris Pinney

cc:

The Honorable Deb Haaland, Secretary of Interior
The Honorable Jennifer Granholm, Secretary of Energy

[4] This number is calculated based on NOAA data. NOAA's estimated fish mortality averages 10% per dam and reservoir. (This is very likely an underestimate by NOAA since adult returns are now less than 1% and juvenile mortality in Lower Granite Reservoir alone is 12%). *See* NOAA Memo "Preliminary survival estimates for the passage of spring-migrating juvenile salmonids through Snake and Columbia River dams and reservoirs, 2019," dated Sept. 19, 2018, from Richard W. Zabel, PhD, Research Scientist, Northwest Fisheries Science Center, to Ritchie Graves, Branch Chief, West Coast Regional Office, at Table 2, available at http://pweb.crohms.org/tmt/agendas/2019/0925_2019_Preliminary_Survival_Estimates_Memo_.pdf. The total estimated number of hatchery Chinook released into the Snake River above Lower Granite is over 20 million. Ten percent of 20 million equals 2 million Chinook smolts killed at Lower Granite; ten percent of the remaining 18 million equals 1.8 million Chinook smolts killed, therefore, breaching 2 of the dams results in an estimated 4 million additional Chinook smolts.