

**James Waddell, PE**  
**Civil Engineer, US Army Corps of**  
**Engineers, Retired**  
**289 Ocean Cove Lane**  
**Port Angeles WA 98363**  
**360-775-7799**  
**kairos42@earthlink.net**

**Sharon Grace**  
**Southern Resident Killer Whale**  
**CSI, Coordinator**  
**P.O. Box 178**  
**Friday Harbor, WA 98250**  
**360-378-6496**  
**sharon.grace@srkwsci.org**

**Kenneth C. Balcomb III, Exec. Director**  
**Deborah A. Giles, Ph.D, Research Director**  
**355 Smugglers Cove Rd**  
**Center for Whale Research**  
**Friday Harbor, WA, 98250**  
**ken@whaleresearch.com**  
**giles@whaleresearch.com**

**Susan Berta, Co-founder & Co-director**  
**Howard Garrett, Co-founder & co-director**  
**485 La Bella Vista Way**  
**Orca Network**  
**Freeland, WA 98249**  
**susan@orcانetwork.org**  
**howard@orcانetwork.org**

April 14, 2016

The Honorable Kathryn D. Sullivan, Ph.D.  
Undersecretary of Commerce for Oceans and Atmosphere Administrator,  
National Oceanic and Atmospheric Administration  
1401 Constitution Ave NW, Room 5128  
Washington, D.C. 20230

Re: Need Immediately to Implement FR/EIS Alternative 4, Breaching the Lower Snake River  
Dams, to Recover ESA listed Salmon Runs and Southern Resident Killer Whales

Dear Dr. Sullivan:

We write today to highlight the urgency and opportunity that breaching the four lower Snake River dams presents to the nation, and to express our concern over NOAA Fisheries West Coast Region's ("NOAA West Coast") continued support for keeping the dams. NOAA West Coast continues to ignore the best available science that for decades has established that dam breaching has the most potential for recovering wild Snake River salmon runs. Federal agencies have expended approximately one billion dollars on fish recovery measures that avoid breaching the dams. The agencies have implemented major systems improvements to the dams and juvenile fish transport, to recover the wild runs. These are Alternatives 3 and 2, respectively, in the Lower Snake River Juvenile Migration Feasibility Study/Environmental Impact Statement (FR/EIS). To date threatened and endangered wild salmon and steelhead are not surviving or recovering. There is a practical way to recover these fish, without further studies. The current operative EIS for fish passage authorizes implementation of Alternative 4, dam breaching through channel bypass, to halt the decline of the wild salmon runs. This is the only remaining permitted alternative yet to be tried.

Snake River dam breaching likely is also the best option to help recover the critically endangered

The Honorable Kathryn Sullivan

April 14, 2016

Page 2 of 6

Southern Resident Killer Whales. In May 2015 NOAA Fisheries in Washington, D.C., spotlighted the orcas as one of the eight most endangered species it protects, stating that the whales would go extinct in the immediate future, if action to save them were not taken. In recognizing that the whales are in danger of immediate extinction, NOAA acknowledged that it knows “the threats facing these species and understand[s] the management actions [it] can take that will have a high probability of success.”

Although the Southern Residents have had a “baby boom” of sorts with eight calves surviving in the last 15 months, the orca population is declining. Since the beginning of this year, at least three known calves were born, but did not survive. In mid-January J55 disappeared a few days after s/he was first seen. The same day J55 was seen, a dead neonate was observed being carried around on the rostrum of a 20 year old J pod female. On March 25, 2016 another J pod calf, a female, washed up on shore near Sooke, B.C., never having been seen alive. To make matters worse, on April 1, 2016 the badly decomposed body of L95, a young adult male born in 1996, washed up off the west coast of Vancouver Island. NOAA had satellite tagged him on February 24, 2016, south of La Push, Washington, in an effort to study the winter habits and habitat of the Southern Residents. L95’s death points to the increasing fragility of the Southern Resident orca population.

The key to the Southern Resident orcas’ extinction or survival is the availability of Chinook salmon, their preferred prey and approximately 80% of their diet. Historically, the Snake River was a huge source of Chinook for the orcas. Since both the threats to the whales and the management actions that can be taken are known, it is time to address the threats, starting with breaching the four lower Snake River dams to recover a historically abundant source of prey for the orcas. Further, if the satellite tagging were related in any way to the death of L95, the satellite tagging should end immediately. Should these iconic whales disappear due to NOAA Fisheries’ failure to act at this critical juncture, it would be a terrible legacy for the current administration.

In addition, dam breaching is the most fiscally responsible action to take. Hydropower produced by the dams is surplus. It has been replaced three times over by greener solar and wind energy. Unlike hydropower, these energy sources do not destroy entire river ecosystems. The highly subsidized Snake River barge traffic is being replaced by rail transport at a lower overall cost and a similar carbon footprint. And with a free flowing Snake River, recreation benefits will skyrocket in many Washington counties. Dam breaching will recover the wild salmon runs, strengthen the Pacific Northwest economy, and save tax/rate payers money.

Prior to writing this letter, we have discussed our concerns with others at NOAA. In August 2015, Dr. Gary Weiss spoke to Eileen Sobeck, the Assistant Administrator for Fisheries, about the effects of the Lower Snake River hydro system on salmon, orca and the overall ecosystem in which they inhabit, and the need to breach the dams. In November 2015 we wrote to Ms. Sobeck requesting a meeting to discuss the issues further. She referred us to the regional office. We met with Barry Thom and others in early January and briefed those in attendance. We expressed our concerns that research shows the wild Snake River wild salmon will disappear in the next few years, and with them the orcas, if the dams are not breached as soon as possible. They informed us in essence that the salmon runs are fine, then told us the same thing that NOAA West Coast has maintained for 15 years—that “it is not necessary to breach the dams at this time.” This belief is as incorrect now as it was 15 years ago, since it is contrary to the region’s own best available science that establishes wild runs on the Snake River are not “fine,” and instead, are disappearing. Misrepresenting the science

has been an ongoing problem from the Western Region. It needs to be corrected. The public has a right to expect more from NOAA. So do the endangered and threatened species that NOAA is charged with recovering.

To assist you and inform any discussions, attached are several documents, many of which were prepared by or with the help of current or retired federal and state public servants. These documents lay out a credible case why the biological, economic, policy rationale and public's view of these four dams demand that they be breached immediately. I, as one example, am a Civil Engineer who retired after a 35 year career with the Corps of Engineers and was the Deputy District Engineer for Programs at the Walla Walla District who recommended that the dams be breached in 2000. I did so after reviewing the \$33 million FR/EIS that described these four dams and their impacts on salmon and the economy.

### Reference Documents

- Executive Order Policy—lays out an approach that does not require Congress to pass legislation to authorize a breach or to appropriate funds to pay for it. The 1980 Northwest Power Act authorizes the breaching action.
- Salmon White Paper, *The Case for Breaching the Four Lower Snake River Dams to Save Wild Snake River Salmon*—lays out the urgency that cannot wait for the next president to act. NOAA West Coast has led many decision makers to believe that the salmon runs are at record levels. These so-called “record runs” are derived by shifting the baselines, counting ever smaller salmon and dumping millions upon millions of hatchery fish on top of the few remaining wild ones. The actions come at enormous cost, all of which will dilute the wild salmon genetics in the immediate future, to the extent that there will be little to no resilience remaining in the salmon runs to withstand climate change, ocean acidification, drought and other dire conditions. We will lose the salmon. Hatchery fish are inbred, display little, if any, resilience, and experience population crashes, often within just several generations. Climate change is further warming the already deadly reservoirs behind these dams and will further increase their global warming methane emissions. *Dam breaching has been delayed nearly 15 years, even though NOAA's research showed that breaching, by itself, likely would recover the lower Snake River Chinook salmon and steelhead runs.* In the interim, wild stocks have continued to decline both in number and in wild genetics. This is likely the last call for wild salmon. When they go, so will the orcas and the rest. Breaching the first dam, Lower Granite, in November of this year must be accomplished to provide the Snake River ecosystem a fighting chance of recovering.
- Orca Science Paper—points out the current lack of food that only gets worse, in spite of what should be good news with the birth of eight surviving calves over the last 15 months. These new calves, should they all survive, will add demand for 30-50,000 salmon. If the dams are not breached and wild salmon allowed to recover, these fish can only come from the tribal, commercial and sport fishermen's harvest.
- Response to NOAA's position paper entitled *Southern Resident Killer Whales and Snake River Dams that the Western Region issued March 16, 2016*—details why NOAA West Coast is

mistaken in not supporting dam breaching to recover Snake River wild salmon and Southern Resident orcas.

- Economic Reports/Analyses—prepared by Earth Economics, a not for profit economics consulting firm highly regarded in the Pacific Northwest, provides corrections to the Corps Walla Walla District’s 2002 economic analysis that was used to justify continued operations and improvements to the dams. The corrected information shows that there was no economic justification then or now to continue with these dams, and that the benefits provided to the nation are only 15 cents for every dollar invested by the taxpayers. This small “benefit” includes the revenue generated from the dams that likely should not be considered, because there is a surplus energy situation in the region. Due to the surplus, when the four dams are generating power, often wind turbines built by the private sector, often through the renewable energy programs, are idled. This alone is enough waste and embarrassment for the Corps and BPA to quickly remedy the situation through breaching. Earth Economics reports also point out that the regional economy of the area is being deprived of 3-4000 jobs by keeping these dams. Indeed, federal appropriations and BPA ratepayer funds paid to employees working on these four dams provide one of the few measurable benefits to the region. Given federal budget limitations, this is not a valid enough reason to continue operations of these dams.
- Cost Reports—provide corrections and updates to the 2002 FR/EIS both for keeping the dams and for breaching them. The Breach Plan/estimate is also formatted as a Supplemental EIS document. Both show how the Walla Walla District provided incomplete or misleading information to the public, elected officials and the federal agencies. The Corps underestimated the cost of operating, maintaining and repairing the dams by at least \$160 million on an average annual basis, while overestimating the cost to breach the four dams by roughly \$500 million. The breach report also shows how the breaching through removing the earthen berms of each dam can be done far simpler than originally planned. This provides the ability to start breaching within a few months, instead of years.

Hundreds of millions of dollars have been spent to improve juvenile and adult salmon migration. At this point everything has been tried at an enormous cost, without benefitting wild stocks. The result is their wild genetics are on the verge of being diluted to the point of no return. It is far cheaper to save salmon by exercising the breach alternative of the active EIS, than to continue with the status quo.

- Summary—describes the efforts of a diverse group of individuals and organizations to test the “will of the people.” It shows that well over 200,000 people have signed petitions, sent emails, written letters to you and other elected officials principally in the Northwest, in addition to an untold number of calls to the White House, Governor Inslee, Senators Murray and Cantwell and others.

The facts we are presenting in the documents referenced above are mostly the governments’ own. And while regional offices continue to ignore the facts, the lone answer left to the unbiased is that the only Reasonable and Prudent Alternative remaining, breaching, must be accomplished. Nonetheless, this is a difficult decision for any one person to put forward without fear of criticism and censure. Based on the government research, data and reports, however, it becomes abundantly

The Honorable Kathryn Sullivan

April 14, 2016

Page 5 of 6

clear that there is no need for more studies, which the regional offices in the Northwest likely heartily would recommend. The dams have been their livelihood for decades, at the expense of the taxpayers, salmon, orcas and the rest of the ecosystem we humans inhabit in the Pacific Northwest. As a matter of comparing government response to an environmental crisis, breaching the four lower Snake River dams is certainly far easier and at virtually no cost, as compared to the restoration of the Florida Everglades.

President Obama has been in possession since May 2015 of a request to issue an Executive Order to begin the breach process in the late fall of 2016. When told that this action probably could be done without the need for Congressional authorization or new appropriations, the president said he would consider the request. We have also briefed the Army Corps of Engineers on the issues, as well as that the 2002 FR/EIS, the current working EIS, permits dam breaching to recover wild Snake River salmon.

We understand that dam breaching is a difficult issue, muddied by decades of misleading economic and biological information that the regional offices have fed to the public and government decision makers. We also are acutely aware of the regional and local politics involved here. We cannot imagine any effort, on any time line, that would change the minds of those so aligned with the misguided perception that these four dams must be maintained *at all costs*. Many people do not agree with this ill-advised perception. When the FR/EIS was conducted, there was overwhelming public support for breaching the dams in the 15 public meetings held as part of the NEPA process in 1999 and 2000. This information was not conveyed to the public or elected officials. There is also much current support for breaching. In the last two years, over 200,000 people have signed petitions, sent emails and letters, or placed an untold but significant number of calls to the White House, Governor Inslee, and Senators Murray and Cantwell. A report outlining these recent actions is attached. It is likely that elected officials would benefit from a breaching action, especially if they were to encourage solutions to mitigate the minimal cost that might arise from breaching.

We request that you support both the president and the Army Corps of Engineers in any action they may take to breach the four lower Snake River dams. If you are not able to do this, we request a meeting in the near future to discuss the issues. Finally, we request that the Western Regional NOAA office retract its March 2016 position paper entitled *Southern Resident Killer Whales and Snake River Dams* that argues for keeping the dams, since it is unsupported by the best available science.

We look forward to your prompt response. Thank you for your consideration of this important matter.

Sincerely,

James Waddell

James Waddell, P. E.

Cc: Jo-Ellen Darcy, Assistant Secretary of the Army CW

The Honorable Kathryn Sullivan

April 14, 2016

Page 6 of 6

Attachments:

1. Executive Order Policy Rational for Breaching
2. Cost Report & Rebuttal  
(The Cost Report is accessible through the Cost Rebuttal in email transmittals)
3. Salmon White Paper, *The Case for Breaching to Recover Wild Snake River Salmon*
4. Orca White Paper
5. National Economic Development Report
6. Regional Economic Development Report
7. Public Outreach Summary