February 23 2016

The Honorable Jo-Ellen Darcy
Office of the Assistant Secretary of the Army (Civil Works)
108 Army Pentagon
Washington DC 20310-0108

Re: Very Low Benefit to Cost Ratio for The Four Lower Snake Dams, It Costs More to Kill Snake River Salmon than to Save Them, Need For Immediate Implementation of Breach.

Dear Assistant Secretary Darcy,

We are writing once again to highlight the urgency and opportunity that breaching the four lower Snake River dams presents to the nation. The urgency, documented in our 3 November 2015 letter, informed you that in spite of approximately one billion dollars spent on systems improvements and juvenile transportation over the last 15 years, recovery of threatened and endangered wild salmon and steelhead ("salmon") has made little, if any, progress. In addition to these staggering costs, mounting operations and repair costs make these four dams very poor infrastructure investments for the nation in that the benefit to cost ratio (BCR) for them is a paltry .15 to 1. In light of the surplus power situation in the Pacific Northwest described in the hydropower report provided to you with our November letter, this BCR likely is even lower. In addition, the lost opportunity in recreation, expanded agriculture and supporting services deprives the region of thousands of jobs each year. Given the constrained budgets and growing financial demands of the Bonneville Power Administration (BPA) and the Corps' Water Resource Projects, it is clearly time to recognize that these expensive dams are doing more harm to our economy than good, by a wide margin.

It is clear now that the systems improvements and juvenile transport alternatives have been costly and self-defeating actions. The 2002 Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (FR/EIS) was developed both to prevent the extinction of wild salmonid stocks and to lead to their recovery. Given the failure of these unreasonable and imprudent alternatives, it is imperative that the only Reasonable and Prudent Alternative remaining in the EIS, dam breaching via channel bypass, be implemented immediately. Through previous communications you should be fully aware that 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. He said he would consider this when it was brought to his attention that this action could be done without the need for Congressional authorization or new appropriations. In our last letter we also requested a meeting and do so again.

We can understand your difficulty in responding to our November letter in light of the misleading economic and biological information that has been fed to the public and elected officials for decades by the Northwest Division, particularly Walla Walla District, BPA and the Northwest National Marine Fisheries Service (NMFS). The hope is that this delay in responding is driven by an earnest effort on your part to enact our recommendations. To further assist you and inform any discussions, enclosed are several documents.

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The first two are companion documents entitled National and Regional Economic Analysis of the Four Lower Snake River Dams, A Review of the 2002 Lower Snake Feasibility Report/Environmental Impact Statement Economic Appendix I (Feb 2016) (FR/EIS). This National Economic Development (NED) analysis corrects and updates the 2002 FR/EIS Economic Appendix I. Earth Economics, a highly regarded environmental economics consulting firm located in Tacoma, Washington, prepared the analysis. In addition to finding several glaring errors and omissions in the 2002 FR/EIS, Earth Economics' application of the Corps Planning Guidance shows that the benefit to cost ratio for keeping the dams in place is .15 to 1. Further, this economic analysis integrates into a single BCR table findings noted in previous reports to you that covered recreational and hydropower economics. In this BCR table, Earth Economics used an updated economic value for hydropower of \$208 million per year, as reported on the Walla Walla District website. But, given the surplus nature of power in the Northwest, this amount is likely an overestimate, as this benefit is likely nothing more than a "transfer" of benefits from idled wind turbines. Thus, at this point, the four lower Snake River dams are a drain of well over \$200 million per year of Corps and BPA tax/rate payer funds from other dams and water resource projects in the region.

The second analysis shows that the Regional Economic Development effects of removing the four Dams will benefit surrounding counties, and provide up to 3-4000 additional jobs resulting from recreational expenditures related to a free-flowing river. This document also points out that the economic benefits derived from returning 10-15 percent of the 40,000 acres of project lands to orchards and vinicultural use and supporting businesses/services was not considered by NWW in the 2002 FR/EIS. This would add more benefits to the currently calculated breaching BCR, that ranges from 4 to 1, to 20 to 1, based on the need or not for replacement power. Theses additional benefits would include at least \$20-30 million per year for Washington State's School budget. A further omission in the FR/EIS is a calculation of the economic benefits in Lewiston, Idaho that would occur when the head water levees are lowered yielding a vibrant riverfront community.

The third attached document is a *Reevaluation/Supplement of the Drawdown Engineering Appendix of the FR/EIS*. The plan shows that while NWW correctly chose channel bypass over full dam removal as the breach alternative, they, used inappropriate design assumptions that led to an overly complicated and expensive method of achieving channel bypass. In correcting these deficiencies, the revised approach uses a similar but simpler breach method that is consistent with the EIS. The corrected cost for breaching the four dams and other mitigation features is roughly \$260 million, rather than the \$860 million used by NWW in the 2002 report. NWW's gross overestimate is the source of the erroneous and oft stated hyperbole that "it will cost a billion to breach" used by regional offices of the Corps, BPA, and NMFS. Consequently, misled elected officials pronounce that breaching is not affordable.

Earth Economics also updated their November 2015 Recreation Reevalution of the FR/EIS by using a point estimate for the consumer surplus. This had the effect of raising the BCR for keeping the dams and lowering the BCR for dam breaching. This is the source input for the above NED and RED reports and is also attached.

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While the corrected cost in 2015 dollars is \$340 million, with a fair amount of contingency still included, these funds are spread over 5 years. By the end of the 5 years, savings of well over \$200 million per year in 2015 dollars result. Furthermore, and most importantly, *it appears to be a clear case that funds for breaching do not need to come from further or new appropriations by Congress*. The Power Planning and Conservation Act provides a mechanism by which BPA can pay this cost and take a credit for doing so on its federal debt on the dams.

The fourth document that we are attaching is entitled *Rationale for an Executive Order*. This is an update from one included in previous correspondence and further details how *the Corps and BPA can address breaching without the need for further congressional authorization and appropriations*. It also explains why breaching is eminently available to the Corps in an existing EIS for the Lower Snake Dams. NEPA advisors from the Corps and EPA have pointed out that the existing FR/EIS just needs some updating, if anything. Indeed your staff pointed that out to us in 2014. Consequently, we have spent a great deal of effort doing so. This effort provides over 250 pages of *supplemental* information derived from government documents and individuals. We prepared this information to expedite the matter, as well as to educate ourselves fully, before asking the President or your office to take action.

To fully inform you, this is a summary of official communications to your office and/or the Corps Headquarters from the undersigned and other cosigners:

- September 13, 2013 letter to you advising as to the lack of meaningful navigation benefits on the lower Snake River.
- August 14, 2014 written statement and testimony for the record to the Inland Waterway Users Board on the lack of navigation benefits on the lower Snake.
- October 9, 2014 letter to you advising NWW's claim of a \$25 million/year navigation benefit was incorrect and the actual benefit was less than \$1 mill/yr on the lower Snake.
- November 18, 2014 written statement and testimony for the record to the Inland Waterway Users Board on the lack of navigation benefits on the lower Snake.
- January 24, 2015 letter to you advising as to the situation Southern Resident Killer Whales are facing in light of ever dwindling Snake River Chinook. Update attached.
- May 25, 2015 letter to President Obama requesting administrative action such as an Executive Order to breach the dams. Your office was provided a copy.
- June 23, 2015 written statement for the record to the Corps Environmental Advisory Board on the overall economic and biological failings of the lower Snake Dams.
- November 3, 2015 letter to you providing an update of Snake River Salmon and Steelhead that based on NMFS, Corps and BPA information shows that they are facing an imminent crisis that must be addressed through breaching in the next year or two.
- December 2, 2015 written statement for the record to the Corps Environmental Advisory Board on the overall economic and biological failings of these dams.

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In these letters, written statements and testimonials, we have pointed out the failing economics and the imminent biological crises for salmon, Southern Resident orcas and other species of concern, and explained the need for the Corps and BPA to divest our nation of the four lower Snake River dams through channel bypass breaching and decommissioning. There are many other higher value dams and water resource projects in need of this funding.

We did receive a response to our first letter to you, in which you quoted your responsibility of ensuring the economic benefits of ongoing projects. We have sought to investigate this, and the biology, and find that the more talent that is applied to this inquiry from people who worked for, or who recently retired from, federal and state agencies very familiar with these dams and/or the species at risk, the more undeniable and necessary breaching these four dams is shown to be. With equal results, we have employed independent economists, utilizing Corps guidance, to review NWW's 2002 Economics' work and update it, as discussed earlier.

Time is now running out. The dams are becoming increasingly costly. Major lock repairs are scheduled for at least two of the dams beginning in December 2016. Navigation will be shut down for at least four months, which will require farmers to use alternative means of transporting their products to market. The money that will be expended on the lock repairs can also be saved, if breaching is ordered soon. The time has long past for more studies, caucus groups, dialogue and discussions beyond the minimum required to review what has been done to date in order to implement a breach, starting with drawdown of Lower Granite Reservoir on *1 November 2016*. And while there may be some level of supplementation required of the EIS, we believe that there is still time to do this if the president issues an executive order in the next few months.

If supplementing the current EIS is needed to implement the only remaining alternative, dam breaching by channel bypass, it could be accomplished in a matter of weeks. It is not the same thing as asking for a Feasibility Report or a Section 216 Disposal Report, although a disposal report may be a likely course of action in order to determine the disposition of project lands. If needed, this can be accomplished in parallel and independent of actual breaching. Also such a report would show additional benefits to the 4 to 1 breaching benefit to cost ratio for breaching, since a likely outcome is the transfer of land to Washington State for use as high value agricultural land, along with the synergistic and supporting business opportunities that would naturally develop. Given the surplus power situation in the region and demand growth dampened by conservation, this benefit could be as high as 20 to 1, if the power is not replaced.

Breaching the dams to save taxpayers' money and to restore the entire lower Snake River ecosystem, while recovering the wild salmon and iconic critically endangered salmon-dependent Southern Resident Killer Whales of the Pacific Northwest, could become a powerful legacy for President Obama and those who support his efforts. The timing is now.

In our last letter we also requested a meeting with you, but did not receive a response. We understand that dam breaching is a difficult issue, muddled by decades of misleading economic and biological information that has been fed to the public and elected. We hope that the delay

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in meeting with us is driven by an earnest effort on your part to consider and enact our recommendations.

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.

Given the urgent need for action and the amount of critical information we are rapidly providing for your review, we again request a meeting with you to brief and review this information in the very near future, if at all possible in the Northwest. If your schedule does not allow this over the next 30 days, we would travel to DC or wherever is convenient for you.

We thank you in advance for your consideration and look forward to your prompt response.

Sincerely,

Signed
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signed
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Attachments:

National and Regional Economic Development Revaluation (2 attachments)
Reevaluation and Supplement to the Drawdown Engineering Appendix, 2002 FR/EIS
Executive Order Policy Rationale
Public Involvement Summary
Orca Update and Supplement to the 2002 FR/EIS
Recreational Economics, Revised