

**Why breaching the 4 lower Snake River Dams is possible Now
and must start NLT 2018
in order to quickly provide a meaningful source of chinook for SRKW**

The chronic declines of chinook, which are at least 80% of the endangered Southern Resident Killer Whales diet, has exacerbated their decline to an effective breeding population of less than 30 individuals. Without, immediate increases in chinook, a few more deaths will make recovery unlikely.

Because genetic diversity in wild chinook is dangerously low and spiraling downward, a breaching delay of even one more year could likely preclude any recovery, especially in the face of climate change. Loss of diversity will also lead to the further demise of hatchery fish.

Actions short of breaching (such as increased spill, more hatchery fish, more habitat restoration, more bypass hardware at the dams, vessel, noise, even a nearly complete shutdown of fisheries in US waters) will not recovery these orca; although it may allow a few to struggle on until they are “legally” extinct 20-30 years from now. Existing studies and data show their prey dependency on Columbia/Snake runs, and the biological benefits of breaching, which yields immediate smolt survival in the millions. Nothing else can produce similar results.

Breaching can be achieved at no cost to the State. The Corp’s current Environmental Impact Statement has dam breaching as an alternative to salmon recovery, as affirmed by the Assistant Secretary of the Army for Civil Works. Governor Inslee can provide most if not all of the impetus to the Corps NW Division Commander to make a breach decision.

Whereas;

The 4 LSRD’s have a benefit to cost ratio of 15¢ on the dollar, forego about 4,000 jobs and \$500 million in direct expenditures and about \$20 million per year that could go to State School budgets, when compared to the benefits of a free flowing river.

The cost of producing power (that is surplus and rarely available for meeting peak demands) adds significant pressure to BPA’s dire financial situation causing rate increases and diverts funds from other dams and restoration work. In the last 93,000 hours of production, the 4 LSRDs produced only 2 hours of power needed by BPA customers.

Northwest Power and Conservation Council recognizes BPA financial crisis:

Elliot Mainzer to NPCC, March 2018, “If there is an axis of nonchalance (on one end) to panic (on the other), I think it’s important that we don’t get into a panic mode, I’m not in a panic mode, but I am in a very very significant sense of urgency mode.” <https://vimeo.com/260456507>

The 4LSRDs provide no flood protection. Irrigation to a small number of farms on Ice Harbor pool can easily be upgraded as a mitigation feature of breaching.

Inland waterborne transport on the lower Snake of wheat has declined significantly over the last 10 years as Washington State (through its grain shuttle service) and farmers are finding it cheaper to ship by rail. Petroleum shipments up the lower Snake virtually ceased several years ago with the only remaining terminal located at mile 1 on the lower Snake River which is NOT impacted by breaching of the 4LSRD's

As such, the Corps needs no new authorities to place the 4 LSRDs into a “non-operational” status. It has an inherit fiduciary responsibility to do so and can do so immediately if asked.

Nor does the ongoing litigation over the 2014 Federal Biological Opinion or the Court's order for a new EIS constrain the Corps from breaching the dams through channel bypass *now*.

Breaching can be financed through existing debt reduction and credits mechanisms as a fish mitigation action by BPA and is far easier than originally planned, making it possible to move from a breach decision, to breaching, in a *matter of months*, not years.

The 2002 EIS's breach alternative has been delayed for over 15 years while implementing failed mitigation alternatives soaring to nearly \$1 billion in cost.

Salmon survival has averaged below 1-to-1 replacement for years and is nowhere near agency recovery goals, wild steelhead returns are now below NOAA established triggers that call for immediate action, and overall returns of Snake runs are down over 70% in the last four years, but these failings have been masked by statements of “record runs” based mostly on massive releases of hatchery fish as well as using a post dam base line of very low returns as opposed to predam runs. The “record runs” of 4-7 years ago of wild fish were about 3% of the historic runs or about 30% of predam runs.

This years returns of spring Chinook are running less than 12% of the 10-year average and predicted to bring a fifth year of decline.

NOAA's 2016 draft and 2017 final Recovery Plan for Spring/Summer Chinook admits that despite an extensive list of salmon recovery actions, ***without dam breaching, lower Snake River salmon runs will not recover***. This leaves little hope of recovering SRKW's unless breaching is started during the winter in water work window starting in December of 2018.

It is strongly suggested that the Orca Task Force immediately implore Governor Insee of the need to press the Corps and BPA to take action now as the measure or metric of when to declare an emergency he asked for in his comments to the Puget Sound Partnership in November of 2017 has already been crossed. Historical and empirical evidence from NOAA, the Center for Whale Research and others provide more than enough information to act now without the need for elaborate prey studies and/or modeling that could take years, if ever, given the low numbers of SRKW and Chinook.

The Task force can then continue with further analysis of other factors bearing on SRKW recovery.

Supporting documentation available on the website damsense.org.