

THE LOWER SNAKE RIVER DAMS

Lower Granite Dam



Perhaps the most persistently controversial issue in the Pacific Northwest is the role of the lower Snake River dams in our clean energy future. Many people equate the timing of the construction of the dams in the 1960's-1970's to the declines in salmon populations on that stretch of the river.

But, are they correct?

A peer-reviewed study released in 2020 showed that the decline in salmon populations is not isolated to the lower Snake River or even to rivers with dams. The study showed that rivers up and down the North American Pacific Coast, from California to southeastern Alaska, have seen an overall decline of 65% of their Chinook salmon populations over the past 50 years.

This time period is correlated with warmer ocean temperatures, which are associated with an increase in the number of salmon predators and a decrease in salmon prey. Another peer-reviewed study from 2020 pointed to warming oceans the likely culprit for struggling Chinook salmon populations. A 2019 report from the United Nation's Intergovernmental Panel on Climate Change indicated that warming, acidifying oceans have become a major threat to all marine fish.

For that reason, there is growing reason to believe that climate change and the health of the marine ecosystem are the greatest limiting factors for salmon. The carbon-free electricity the dams provide may in fact be a critical tool in our efforts to decarbonize our grid and reverse warming ocean conditions to help salmon populations thrive in the decades to come

REALITIES OF BREACHING

According to the 2020 Columbia River System Operations Environmental Impact Statement, breaching the lower Snake River dams could...

- **double the risk** of region-wide blackouts
- **add an additional 3 million metric tons of carbon** to the atmosphere each year from fossil-fueled electricity
- **increase the region's electricity costs by \$800 million a year** and the Bonneville Power Administration's power costs by 50%, which could **increase energy costs at home by up to 25% or more**
- **result in the loss of \$540 million per year** in regional economic productivity
- **result in the loss of 4,900 jobs** as a result of higher electricity costs
- **reduce social welfare by \$458 million annually** from the loss of irrigated land and farm laborers
- **add 79,000 more semi-trucks** to the road each year

Several models and studies demonstrate that there may be little to no real-world benefit to the destruction of these dams, while the numerous harms are clearly outlined as shown above. Still, it is important to continue the mitigation efforts that have significantly aided salmon migration thus far.

THE VALUE OF THE DAMS

• The lower Snake River dams support a growing community of nearly 300,000 people—one third of whom identify as Hispanic—who live in the Tri-Cities area, and provide a local source of affordable, carbon free electricity that is critical to the region.

• Dam operators can increase generation to power roughly two million homes during heat waves or cold snaps, preventing blackouts. Under normal circumstances, they produce the power for about 750,000 on average.

• The operation of Ice Harbor Dam and nearby McNary Dam provide a crucial source of drinking water for Tri-Cities communities. It also enables irrigation for 60,000 acres of farmland in central and southeastern Washington that provide important agricultural job opportunities.

• The lower Snake River dams provide up to one quarter of BPA's operating reserves. Reserves represent the additional generation that utilities are required to hold in case of unexpected changes in generation or electrical demand. Bonneville is required to hold these reserves to ensure the reliability of the grid.

