

THE SCIENCE IS CLEAR: BREACH THE SNAKE RIVER DAMS

In the 1990s, 30 scientists from state, federal, tribal, and other entities participated in the Plan for Analyzing and Testing Hypotheses (PATH) process. The PATH goals were to formulate and test hypothesis to achieve recovery of listed Wild Snake River salmon and steelhead. **The PATH analyses concluded that breaching the four lower Snake River dams was the only option that would provide recovery.** This option was found to have the “highest certainty of success and the lowest risk of failure.”

The PATH conclusions have been reaffirmed by scientific review panels, agencies, and scientists for the past 25 years.


$$\frac{\text{\# ADULTS}}{\text{\# SMOLTS}} = \text{SAR}$$

2% SAR = (2 return spawners/100 smolts) to sustain Snake River populations.



4% SAR to Rebuild Healthy & Harvestable.



Scientific evidence demonstrates that the dams are the “primary cause” of Salmon declines. Adult salmon return rates are two to four times higher in the Yakima and John Day rivers, respectively, compared to the Snake River. These three rivers experience the same treaty and nontreaty fisheries, marine mammal predation, and ocean conditions. The primary difference among them is the number of dams they must pass. Wild, Snake River Salmon and Steelhead cannot recover under the status quo.

SNAKE RIVER VS. MID-COLUMBIA BASIN

In the 1960s, with four dams, SARs for wild, Snake River anadromous salmon ranged from 3.5% to 6.5%. The productivity of Snake River Chinook salmon declined precipitously after construction of four additional dams between 1969 and 1975 compared to productivity of Chinook salmon in the John Day River. Between 2000-2017, wild spring Chinook Salmon in the mid-Columbia basin fared significantly better than Snake River stocks. SARs averaged 3.6% in the John Day River, passing above three dams and 2.5% in the Yakima River, passing above four dams.

Today, Snake River wild spring/summer Chinook Salmon are unable to meet SARs goals. Recent SARs have only averaged **0.9%** above eight dams and the fish are moving rapidly toward extinction.

THE MIDDLE FORK SALMON RIVER

The primary causes of salmon declines are degraded habitat, excessive harvest, detrimental hatchery effects, and dams. Research on the Middle Fork Salmon River provides strong evidence that the dams are indeed the primary cause of the declines. This largely wilderness habitat provides exceptional, high quality, natal habitat for the unique wild, genetically diverse fish with no hatchery stocking and low harvest rates. Yet, Middle Fork populations are non-viable and at high risk of extinction from low abundance and low productivity. The Snake River dams are the only factor influencing the salmon populations here. Research published in 2024 confirms that the primary remaining and most effective action to increase Middle Fork salmon populations is to restore the migration corridor by breaching.



FOR MORE INFORMATION:
Drue Banta Winters
dwinterse@fisheries.org