



# “State of the Snake” 2020

As fish returned to spawning grounds on the Snake River this year, they passed through eight dams and were counted through a PIT tag detection system at Lower Granite Dam. Fish counted in 2020 reflect the enduring decline of salmonoids in the river, with sustained negative implications for the food chain they are a part of, and the local economy. It has been 28 years since the spring, summer and fall chinook run were listed under the Endangered Species Act (ESA), 29 years for sockeye, and 23 years for steelhead, with no recovery in sight for any group. In 2020 Bonneville Power Administration continued status quo investments in salmon recovery through the Fish and Wildlife Program and Snake River Compensation Plan, and failed to recommend dam breaching in a 2020 Environmental Impact Statement. Immediate breaching of the four lower Snake River dams remains the appropriate solution to save species from impending extinction.

## Lower Granite Dam Fish Returns 2016 - 2020

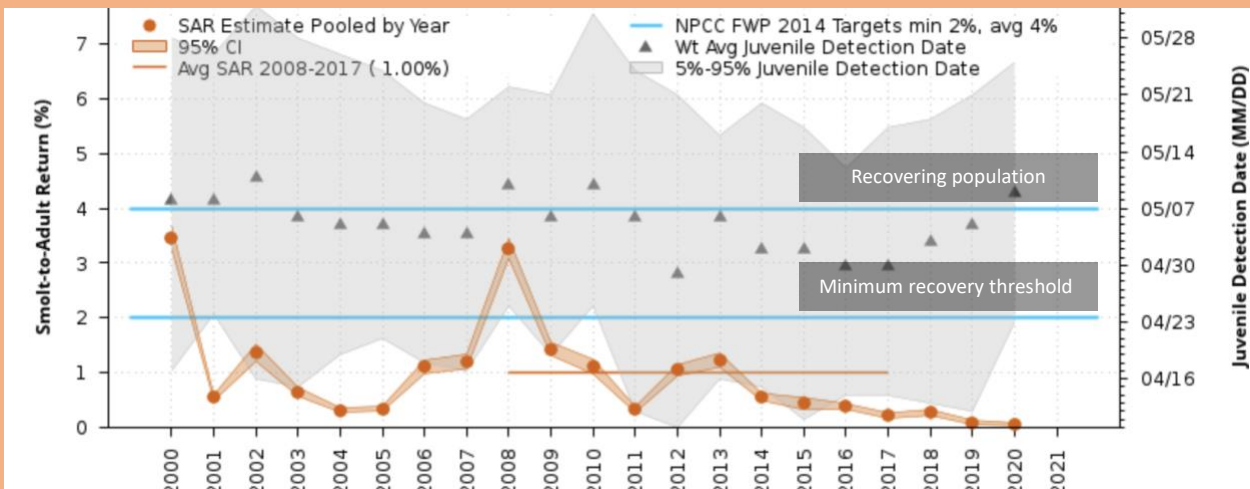
compared to 10 yr Average

Fish Runs	2016	2017	2018	2019	2020
Spring Chinook	6%	-56%	-50%	-69%	-60%
Summer Chinook	-28%	-48%	-58%	-72%	-55%
Fall Chinook	6%	-26%	-54%	-58%	-34%
Sockeye	-21%	-80%	-76%	-92%	-33%
Steelhead	-42%	-54%	-66%	-76%	-50%
Wild Steelhead	-47%	-67%	-71%	-69%	-39%

Figure 1. Data from Columbia Research Basin, <http://www.cbr.washington.edu>

The chart above shows the number of adult fish returning in 2020 are **below the ten-year average for all fish run types**. A trend of decreasing ten-year averages is especially concerning for steelhead whose 2020 ten-year average is 38% below what it was in 2010. This is in spite of hatchery supplementation and an inclusion of genetically diluted wild fish in wild fish counts. In reality, genetically wild Salmon entering the basin are below 1% of historical numbers.

**Smolt-to-Adult Return (SAR) Estimates Lower Granite (Juvenile) to Lower Granite (Adult)  
PIT-Tagged Snake River Spring/Summer Chinook ESU (All)  
Observed as Juvenile at Lower Granite  
Possible Transport**



[http://www.cbr.washington.edu/dart/query/pit\\_sar\\_esu](http://www.cbr.washington.edu/dart/query/pit_sar_esu)

The declining condition of these runs is further expressed in the graph above, showing Smolt to Adult Ratio (SAR) data over time. SAR values are the percentage of young pit-tagged fish that are counted returning to spawning grounds as adults. In 2020 this number was 0.06% for spring and summer chinook. Another way to describe this is that the percentage of young pit-tagged chinook returning as adults was well below one percent, only 6% of 1%.

The Northwest Power & Conservation Council's (NPCC) SAR goals are 2% for mere survival of the species and 6% for recovery of the species. Snake River Chinook **SARs have only been above 2% in two of the past twenty years**. The 2017 recovery plan from NOAA states that the extensive list of actions in the plan “will *NOT* get us to recovery” (page 241). The downward trending curve seen in the graph, over the last 7 years, shows these actions are not only not leading to recovery but leading to extinction.

**The time is now for federal agencies to face the reality of extinction, or act, and immediately breach the four dams on the lower Snake River.** With only four dams instead of eight in a salmonids way, SAR values have the best chance of reaching recovery standards, not unlike current SAR values for Mid and Lower Columbia fish that are 2.3 - 3.4 times higher.

*For more information on salmon recovery investments, the breach solution, and why and how breaching will save salmon, orca, and money, visit [www.damsense.org](http://www.damsense.org).*

*All data is from Columbia Basin Research, Columbia River DART unless otherwise noted.  
[http://www.cbr.washington.edu/dart/query/adult\\_daily](http://www.cbr.washington.edu/dart/query/adult_daily)*

*Dam Sense 501(c)(3). Published January 2021.*