

# **Colville Confederated Tribes Fish & Wildlife Department**



2/1/2024

## **Reintroducing Salmon Upstream of Chief Joseph and Grand Coulee Dams**

**Purpose:** As stated by Colville tribal elder Mary Marchand, "*If you bring back our salmon, you will bring back our culture.*" Our goals are to reconnect salmon to their historic habitat and to the people. Release locations and the number of salmon will be selected to meet multiple objectives including spawning, harvest, ceremonies and research. The effort includes a science-based phased approach to test feasibility as well as cultural and educational releases that focus more on providing fish for ceremonies, harvest, public outreach and ecological benefits.

**Phase I** is complete. The work included assessment of habitat availability and suitability, fish stock and risk assessments which looked at the genetic, disease, competition, and predation risks and benefits of 40 fish stocks across five species. A life cycle model was developed to estimate outcomes of restoration scenarios. Phase 1 also included evaluating passage facilities and technologies at existing dams to determine how it might be applicable to Chief Joseph and Grand Coulee dams, as well as next steps.

**Phase II** is underway, it involves experimental pilot releases of chinook and sockeye salmon into blocked areas and the design and testing of interim passage facilities. Coordination with federal agencies on permitting, funding and implementation requires a lot of work and collaboration. We expect this phase to take at least 20 years to complete. The United States Government has committed to support and fund the tribes to implement the project, which will cost more than \$200 million.

### Cultural and educational releases will continue in conjunction with the phased approach.

### Goals of the cultural and educational releases include:

- Meet cultural and ceremonial needs of the tribes by reconnecting salmon with their historic habitat and reconnecting people with the salmon.
- Contribute to knowledge about movement, survival, and behavior of fish in the streams, reservoirs and dams that will answer key uncertainties or better inform the development of experimental designs for studies in later phases of reintroduction.
- Provide opportunity for salmon to spawn in the natural environment to generate offspring for downstream fisheries and future stock for additional reintroductions.
- Ecosystem benefits such as reintroduction of marine derived nutrients for stream, riparian, forest and wildlife.

The Colville Confederated Tribes (CCT), Spokane Tribe of Indians, Coeur d'Alene Tribe, Upper Columbia United Tribes (UCUT), Washington Department of Fish and Wildlife (WDFW) and other stakeholders have been working on salmon reintroduction upstream of Chief Joseph and Grand Coulee dams for many years, and the efforts are starting to pay off.

In 2014, the Northwest Power and Conservation Council (NPCC) adopted the phased approach in their fish and wildlife program. In 2019, the UCUT tribes delivered the Phase 1 report to the Northwest Power and Conservation Council and it received a favorable review by their Independent Scientific Advisory Board. In recent years, the efforts received support and recognition from the State of Washington, Governor Inslee's Orca Task Force, the Columbia Basin Partnership, and the Pacific Fisheries Management Council. The CCT and our partners at UCUT, U.S. Geological Survey, Pacific Northwest National Laboratory, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation and WDFW are now working on Phase 2.

Since 2019, the Colville Tribes' Fish and Wildlife Department and our partners at UCUT have released over 1,000 adult chinook and thousands of juvenile chinook into the waters of the blocked area (above both dams) to support ceremonies and implement studies to evaluate fish performance and behavior.

Year	Life Stage / Species	Locations	Number Released
2019	Adult Chinook	Rufus Woods, Keller, Kettle Falls	242
2020	Adult Chinook	Sanpoil, Grand Coulee, Northport	150
2021	Adult Chinook	Rufus Woods, Sanpoil, Keller Park	342
2022	Adult Chinook	Sanpoil, Northport	410
2023	Adult Chinook	Rufus Woods, Sanpoil	426

### Cultural and Educational Releases of adult chinook by the CCT:

\*note: many other adult chinook have been released by the Spokane and Coeur d' Alene Tribes.

**Juvenile Salmon Releases:** CCT has been working with STI, CDAT, WDFW, DPUD, Pacific Aquaculture and the USFWS to develop hatchery rearing and release options for the reintroduction effort. From 2017 to 2022, the group began to experiment rearing in the blocked area and releasing a few thousand fish per year with PIT tags for monitoring.

In 2022, we partnered with USGS to begin a 4-year acoustic tracking study of juvenile chinook.

In 2023, we ramped up the effort and were able to release nearly 60,000 juveniles with PIT and/or acoustic tags for behavior and survival monitoring. About 53,000 of these were reared in net pens at Sherman Creek, Two Rivers and in Rufus Woods.

We anticipate releasing more than 160,000 juvenile chinook in 2024.