

Clearwater River Coho Restoration

A tribal success story



Coho salmon were officially declared extirpated, or non-existent, in 1986 in the Clearwater and other Snake River subbasins in Idaho. This was unacceptable to the Nez Perce Tribe. Understanding the cultural and ecological significance of coho to the Clearwater River, the Nez Perce Tribe worked hard and has been successful in bringing these fish back.

A bundant numbers of coho once returned to the Clearwater River, but the installation of the Lewiston Dam in 1927 eliminated their return. Idaho Fish and Game's efforts to restore them during the 1960s failed. Plagued by ice formation, dewatering, flooding, and siltation, the state-run restoration program was the last and only attempt at rebuilding coho populations until the 90s.

Nez Perce Tribe's Clearwater River Basin Coho Restoration Project

The Nez Perce Tribe initiated its Clearwater River Basin Coho Restoration Project in 1994. The result of an agreement under *U.S. v. Oregon*—between the tribes and state and federal agencies—allowed the tribe to use surplus coho eggs from the lower Columbia River to reintroduce the species in the Clearwater River Basin.



Yoosa Creek, a Lolo Creek tributary of the Clearwater River

After a few years, the Nez Perce tribe began replacing some of the lower Columbia fish with juveniles produced from inbasin returning adults. By choosing the fish that had demonstrated the ability to migrate hundreds of miles to and from the ocean, pass eight dams, and return to their Clearwater tributaries, the tribe hoped to create a broodstock that was better adapted to local conditions.

As anticipated, survival rates for smolts from this new localized broodstock have been greater than for lower Columbia River smolts, providing evidence that the naturalization process is indeed occurring.

Supplementation is a component of the tribal coho reintroduction effort

The Regional Assessment of Supplementation Project (RASP) in 1992 defined supplementation as the use of artificial propagation in an attempt to maintain or increase natural production while maintaining the long-term fitness of the target population and keeping the ecological and genetic impacts on non-target populations within specified limits.



Coho production under this program

Returning adult coho are collected at Dworshak National Fish Hatchery, Kooskia National Fish Hatchery, and Lapwai Creek. The adult fish are then spawned at Kooskia National Fish Hatchery. Approximately 300,000 juvenile coho are incubated, hatched, and reared at the Dworshak and Kooskia hatchery facilities.

An additional 650,000 eyed Clearwater River coho eggs are transferred to Eagle Creek National Fish Hatchery in Oregon.



Adult coho released into Lolo Creek, where they quickly spread out looking for spawning waters and gravel

In the spring, coho smolts at Dworshak are transported to Kooskia National Fish Hatchery. After acclimating for 4-6 weeks, the coho smolts are released into Clear Creek, a tributary to the Clearwater River. About 550,000 coho smolts from Eagle Creek National Fish Hatchery are released into Lapwai Creek (275,000) and Clear Creek (275,000). The Potlatch Corporation rears an additional 30,000 coho fry for release into Orofino Creek each year in May.

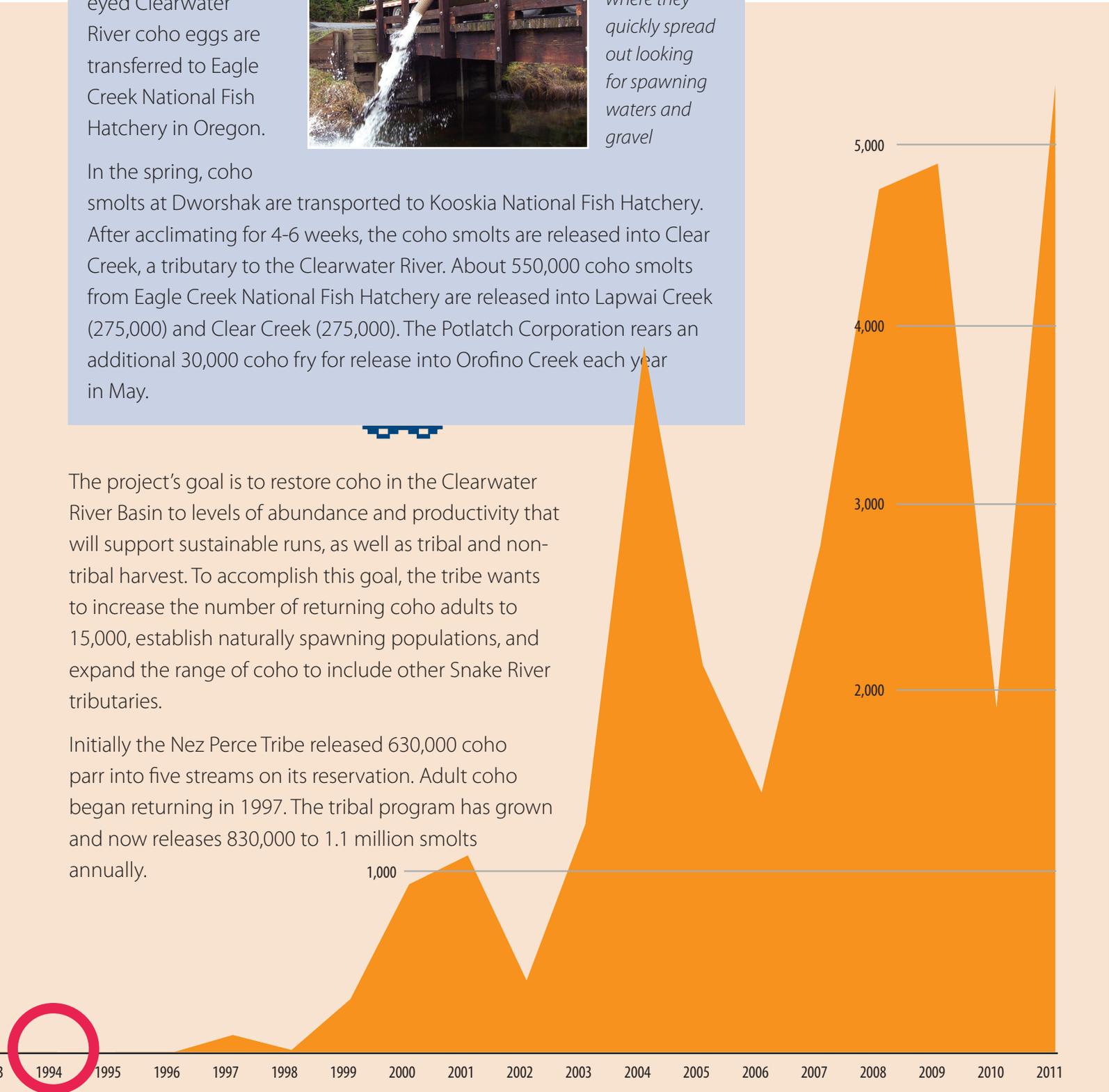
Total returns of Clearwater River coho (Lower Granite Dam counts).

The year Clearwater coho reintroduction began is circled in red.



The project's goal is to restore coho in the Clearwater River Basin to levels of abundance and productivity that will support sustainable runs, as well as tribal and non-tribal harvest. To accomplish this goal, the tribe wants to increase the number of returning coho adults to 15,000, establish naturally spawning populations, and expand the range of coho to include other Snake River tributaries.

Initially the Nez Perce Tribe released 630,000 coho parr into five streams on its reservation. Adult coho began returning in 1997. The tribal program has grown and now releases 830,000 to 1.1 million smolts annually.



Pacific Coastal Salmon Recovery Fund

Critical to the Nez Perce Tribe's success in returning coho populations has been the Pacific Coast Salmon Recovery Fund (PCSRF), the only source of funding for this project since 2000. The PCSRF program makes funding available to Washington, Oregon, Idaho, Nevada, California, and Alaska and to the federally recognized tribes of the Columbia River and Pacific Coast, including Alaska, for projects necessary to conserve salmon and steelhead populations.

Finding Success in the Clearwater River

Data collected from PIT (passive integrated transponder) tags in 2011 indicated that 15,000 Clearwater coho adults passed Bonneville Dam. The same year, over 5,300 adult coho passed Lower Granite Dam. Tribal biologists counted over 200 coho redds in Clearwater tributaries in 2011. Although most juvenile releases were to Lapwai and Clear Creeks on the reservation, natural production of coho salmon has been documented in Lolo Creek, Potlatch River, Catholic Creek, and in the North Fork Clearwater River (all tributaries to the Clearwater River), and also in the Tucannon River (a tributary to the Snake River).



The Clearwater Coho Restoration Project provides benefits to the tribe and the region. Returning adult coho support a tribal and non-tribal fishery along the Columbia River and provide the tribal hatchery program with a local broodstock. Because of this program, tribal members are exercising their treaty reserved fishing right, and coho are once again spawning in the wild.

Coho Restoration in the Wenatchee, Methow, and Yakima Rivers

Similar coho reintroduction and restoration has occurred in the Wenatchee, Methow, and Yakima river basins. The Yakama Nation's Yakima River Coho Re-Introduction Study and its Wenatchee and Methow coho reintroduction program are successful, with results comparable to the Nez Perce Tribe's Clearwater coho restoration. Despite starting with out-of-basin hatchery stock, the Clearwater, Yakima, Wenatchee, and Methow rivers are seeing increasing returns of natural origin coho—fish that are adapting to their new environment and establishing spawning populations in new habitat areas.

For More Information

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