

Columbia Basin Salmon in Peril

Wild fish populations in the Columbia Basin are in serious trouble, with key stocks teetering on the brink of extinction

The Columbia River Basin, spanning seven U.S. states and one Canadian province, was once the largest salmon-producing river basin in the world. Columbia Basin salmon are central to an entire ecosystem, providing food for iconic species from critically endangered orca whales to bears and bald eagles. These salmon are the foundation of commercial and recreational fisheries that support family wage jobs from California to Alaska. And they are central to the treaty rights and ways of life of Native American Tribes, who reserved the right to continue to fish as they had traditionally when they ceded millions of acres of land in the basin.

Today, Columbia Basin salmon are in serious trouble, especially those that return to the Snake River to spawn. Basin-wide, most wild salmon and steelhead populations are less than 5% of their pre-1850s levels. Some, including several stocks from the Snake River, are less than 1% of their historic levels.¹

These critically low numbers are well below healthy abundance goals. For example, the Northwest Power and Conservation Council established an interim healthy abundance goal of 5 million salmon returning annually to the Basin by 2025² – but current returns (even including hatchery fish) are less than half that goal. Current returns for specific stocks are also well below the mid-level healthy abundance goals established by the regional Columbia Basin Partnership Task Force.³ For some of the species that have experienced the steepest declines from historic levels, such as Snake River Spring/Summer Chinook, returns are so low that they are approaching the functional extinction threshold.

Earthjustice has produced a series of infographics, based on publicly available data from federal agencies, states and tribes, to help explain how Columbia Basin salmon and steelhead remain in serious trouble. The reality is startling clear: many Columbia Basin salmon and steelhead species are still hovering on the brink of extinction. And time is running out to save them.

¹ <u>https://www.fisheries.noaa.gov/resource/document/rebuilding-interior-columbia-basin-salmon-and-steelhead</u>, p.8.

² <u>https://www.nwcouncil.org/sites/default/files/2020-9.pdf</u>, p.11 & n.8.

³ <u>https://www.fisheries.noaa.gov/resource/document/rebuilding-interior-columbia-basin-salmon-and-steelhead</u>, p.8; <u>https://s3.amazonaws.com/media.fisheries.noaa.gov/2020-10/MAFAC_CRB_Phase2ReportFinal_508.pdf?null.</u>



Columbia Basin Salmon in Trouble

Only one of the wild salmon and steelhead stocks that return to the Columbia Basin above Bonneville Dam, Mid-Columbia River Summer/Fall Chinook, is anywhere near its historical abundance.



Source: Rebuilding Interior Columbia Basin Salmon and Steelhead, NOAA 2022 (Table 2).



Salmon Abundance is Dangerously Low

Of these seven Interior Columbia Basin wild salmon stocks listed as endangered or threatened, none are doing well compared to historic abundance and only one stock, Snake River Fall Chinook, is approaching a healthy abundance goal.



Source: Rebuilding Interior Columbia Basin Salmon and Steelhead, NOAA 2022 (Table 2).



Snake River Spring/Summer Chinook

Wild Fish Only

Snake River Spring/Summer Chinook are one of the species hovering closest to extinction—and time is running out to save them. For decades, returns have been well below the threshold for protection under the federal Endangered Species Act, and returns are perilously close to the functional extinction threshold.

Snake River Spring/Summer Chinook – Wild Fish

Columbia Basin salmon stocks naturally experience fluctuations in abundance from year to year, **but most wild stocks continue a declining trend, and some — like Snake River Spring/Summer Chinook — are nearly at the quasi-extinction threshold** (the point at which a population is functionally extinct because numbers are too low to recover).



Wild and Hatchery Fish

Hatchery fish are important to provide harvest opportunity, but hatchery fish alone cannot rebuild healthy wild salmon stocks—they lack the full genetic and geographic diversity of healthy, self-sustaining wild populations. While hatchery production for some Columbia Basin salmon has increased, wild populations remain critically low.

Snake River Spring/Summer Chinook – Wild and Hatchery Fish

Production of hatchery fish (from a captive breeding program) has increased in recent years, but wild stocks are still declining. Hatchery fish are important to allow some harvest, but hatchery fish cannot rebuild healthy wild salmon stocks.



Source: Idaho Department of Fish and Game, StreamNet.org