

Fishery Scientists announce poor 2023 Outlook for California's Ocean Salmon Stocks

March 8, 2023



At the annual Salmon Information Meeting held virtually today, state and federal fishery scientists presented the numbers of spawning salmon that returned to California's rivers late in 2022 and announced the abundance forecasts for key California stocks.

The 2023 projection for Sacramento River fall Chinook, the most predominant stock harvested in California's fisheries, is estimated at 169,767 adults, one of the lowest forecasts since 2008 when the current assessment method began. For Klamath River fall Chinook the forecast is 103,793 adults which is the second lowest forecast since the current assessment method began in 1997.

While low and disappointing, neither abundance forecast is the lowest recorded. In 2009, the Sacramento forecast was 122,200 and in 2017, the Klamath forecast was 54,200.

Salmon numbers are episodic over time and life cycles, which is generally a three year period from birth as eggs hatching to returning adults from the ocean. For example, in 2022 ocean commercial catch was

considerably greater than preseason expectations.

The data also indicates in years following wetter hydrologic years that abundance is higher. For example, the 2010 above average rainfall year resulted in higher stock forecasts of California adult Chinook in 2012 and 2013.

Conversely drier years regularly result in lower abundance three years later. Three years ago, in 2020, conditions were particularly severe with drought.

“This is a decades-long trend, and the past few years of record drought only further stressed our salmon populations,” said Charlton H. Bonham, Director of the California Department of Fish and Wildlife (CDFW). “Unfortunately, low stock abundance is somewhat expected despite protective and restorative actions California has taken to increase hatchery production, improve release strategies, and increase the availability of critical spawning and rearing habitats.”

The current wetter weather in California is good news. Relatively higher returns in 2019 and 2020 may help boost the number of spawning adults returning to the Sacramento Basin in 2023, as fish hatched in 2019 and 2020 will be returning this year. Even though this boost will be moderated by evolving ocean conditions and ongoing climate disruption, there are bright spots and reasons for caution heading into 2023 and beyond. Rebuilding plans have been developed for the Sacramento River Fall Chinook and Klamath River Fall Chinook stocks after multi-agency collaboration between the Pacific Fishery Management Council (PFMC), CDFW, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Tribes and industry representatives. Meanwhile, other ambitious efforts to rebuild salmon are continuing, most notably implementation of the largest river restoration and dam removal project in the nation’s history in the Klamath Basin.

The Salmon Information Meeting was attended by fishing industry participants, conservation organizations and other interested parties. During the meeting, ocean and in-river recreational anglers and commercial salmon trollers asked questions about the latest numbers and provided comments during a public listening session that followed the informational presentations.

Stakeholder input will be taken into consideration when developing three ocean fishery season alternatives during the March 5-10 PFMC meeting. Final ocean salmon season regulations will be adopted at the PFMC’s April 1-7 meeting. The California Fish and Game Commission will consider and approve inland fishery seasons and regulations this spring, with final decisions in May.

Following several years of poor returns to the Klamath River Basin, Klamath River fall Chinook salmon were declared overfished in 2018 and have not yet achieved a rebuilt status under the terms of the federal Salmon Fishery Management Plan.

In 2022, returns of Sacramento River fall Chinook fell well short of conservation objectives, and now may be approaching an overfished condition after being declared rebuilt in 2021. In response, federal and state

agencies are expected to take a conservative approach when approving 2023 salmon seasons to provide additional protective measures to these stocks, and very limited or no fishing in 2023 appears possible.

To access materials and information presented at today's meeting or to learn more about the salmon season setting process, please visit CDFW's Salmon Preseason Process web page. General ocean salmon fishing information can be found on CDFW's Ocean Salmon Project web page or by calling the CDFW Ocean Salmon Hotline at (707) 576-3429.