Oregon Coast Coho Conservation Plan
2024 Annual Report

The Oregon Coast Coho Conservation Plan (OCCCP) was approved by the Oregon Fish and Wildlife Commission in 2007 as the State of Oregon's conservation and management plan for the Oregon Coast (OC) Coho Salmon Evolutionarily Significant Unit (ESU). The OC Coho Salmon ESU is comprised of 21 independent populations within 5 strata (North Coast, Mid-Coast, Mid-South Coast, Lakes, and Umpqua).

ESU Status Summary

In 2024, the wild spawner abundance estimate for the OC Coho Salmon ESU was 161,293 fish, which is 125% of the previous 34-year average. Wild adult coho spawner abundance was above average in 12 of the 21 independent populations. The juvenile coho abundance estimate for the ESU in 2024 was 3.0 million parr, which is 88% of the long-term average. Freshwater productivity continues to be a primary limiting factor in the ability of the ESU to reach the broad sense recovery goals identified in the OCCCP. State and federal agencies, tribes, and other non-governmental organizations are continuing to collaborate and focus efforts to develop and implement population-specific strategic action plans to address limiting factors.

Measurable Criteria

As mandated by Oregon's Native Fish Conservation Policy (OAR 635-007-0502 to 0509), the OCCCP identified measurable criteria to evaluate progress towards reaching the desired status goals for each of the independent populations in six categories: (1) abundance, (2) persistence, (3) productivity, (4) distribution, (5) diversity, and (6) habitat. Using data and summaries from the Oregon Adult Salmonid Inventory & Sampling (OASIS) Project and the Aquatic Inventories Program (AQI), the results of each criterion's status for 2024 are summarized below. More information on these measurable criteria can be found at the ODFW Recovery Tracker website (https://nrimp.dfw.state.or.us/RecoveryTracker).

The OCCCP's targets for measurable criteria reflect broad sense goals for the ESU, not delisting goals under the federal Endangered Species Act (ESA). OC Coho Salmon are listed as threatened under the federal ESA and the National Marine Fisheries Service (NMFS) has developed a Decision Support System (DSS) to evaluate biological recovery criteria for the ESU. The most recent federal status review was completed in 2022. The OCCCP broad sense goals represent a future condition and performance of the OC Coho ESU that is significantly higher than a level at which the ESU would be considered a candidate for federal ESA listing. The OCCCP describes the broad sense goals as ambitious goals that are expected to be reached over 50 years of sustained conservation actions including habitat protection, restoration, and enhancement.

Abundance

This criterion is intended to ensure adequate numbers of naturally produced spawners return from the ocean to guarantee the health of the population and provide economic, societal, and

ecological benefits. Spawner abundance goals vary based on marine survival (extremely low, low, medium, or high). The naturally produced OC Coho Salmon spawner abundance estimate for the ESU increased from 153,006 fish in 2023 to 161,293 fish in 2024. The 2024 spawner abundance estimate for the ESU was 125% of the previous 34-year average (129,425). Abundance was above average in all North Coast and Mid-Coast strata populations and below average in all Lakes stratum populations. Abundance was below average in three of four populations in both the Umpqua stratum and Mid-South Coast stratum.

The ESU spawner abundance estimate was approximately 23% of the marine survival-specific OCCCP abundance goal representing broad sense recovery (the marine survival category for adult coho returning in 2024 was Medium in the Amendment 13 Harvest Management Matrix). At the population scale, estimated spawner abundance as a percentage of the broad sense recovery goal ranged from less than 5% for some populations to over 40% for others (details for each population are available at https://nrimp.dfw.state.or.us/RecoveryTracker).

Persistence

This criterion uses the forecast probability of persistence for each independent population based on results from population viability simulation models. This metric was assessed during plan development and 11 of the 21 independent populations passed the criteria. ODFW estimated persistence probability for each independent population using updated population viability simulation methods in the 2019 12-Year OCCCP Assessment. These estimates are not directly comparable to those in the original OCCP assessment (see 12-Year Assessment for details).

Productivity

The criterion for productivity is the annual estimate of naturally produced recruits per spawner (R/S) in each independent population and the ESU. This criterion was assessed during the 2019 12-Year OCCCP Assessment using an interim approach described in OCCCP, and none of the populations have yet achieved broad sense goals for productivity.

Although not directly used in the productivity metric, juvenile abundance information relative to spawners provides insight into freshwater productivity (the R/S productivity metric includes both freshwater and marine productivity, as the "recruits" are returning adult spawners). The 2024 juvenile abundance estimate from summer snorkel surveys conducted throughout the ESU was 3.0 million parr. The long-term average for the project is approximately 3.4 million parr and abundance estimates have varied from 2.6 to 4.9 million parr annually since 2000. In 1998 and 1999, the first two years of monitoring, annual estimates were less than 1.0 million parr (see report here).

Within Population Distribution

The metric for this criterion is the percentage of random, spatially balanced surveys that have greater or equal to four wild adult coho spawners per mile for each independent population. Goals for this criterion depend on the marine survival category for returning spawners. In 2024, occupancy goals were met or exceeded in eight populations (Necanicum, Nehalem, Tillamook, Yaquina, Beaver Creek, Alsea, Siuslaw, and Coos).

Juvenile occupancy of available rearing habitat is another indicator of within population distribution. Although juvenile occupancy is not one of the measurable criteria in the OCCCP, it is a criterion in the DSS used by NMFS to inform federal status reviews. In 2024, juvenile coho salmon site occupancy in summer snorkel surveys was 84% for the ESU, which is above average. One of the NMFS recovery criteria is to have ≥80% of available habitat occupied. Over the last 12 years, average site occupancy at the ESU scale is 82%.

Diversity

The metric for this criterion is the 100-year harmonic mean of spawner abundance (projected from a population viability model) for each independent population. This criterion was assessed during the 2019 12-Year OCCCP Plan Assessment using actual spawner abundance estimates from the contemporary period (1990-2019), and 13 of the 21 independent populations exceeded the threshold value of at least 1,200 naturally produced adult spawners.

Habitat Condition

This metric is defined as the amount of available high-quality habitat (HQH) in each independent, non-lake population. HQH is defined as habitat that can produce 2,800 smolts/mile. The habitat condition criterion was assessed in the 2019 12-Year OCCCP Plan Assessment and the results indicated that the mileage of HQH remains low relative to the plan's broad sense goals in most populations. This was not unexpected given the deficit of HQH identified in the OCCCP and the protracted time periods required to restore landscape and geophysical processes and instream habitat. Even though restoration efforts have been ongoing, significant and continued investment in habitat restoration is needed to reach the broad sense recovery goals. Overall, freshwater productivity continues to be a primary limiting factor in the ability of the ESU to attain the broad sense recovery goals.

Conservation Plan Strategy Implementation

In 2024, ODFW continued to implement its commitments identified in the OCCCP. The status of those commitments is discussed below by action, as identified in the OCCCP.

Hatchery Management – This commitment was met and is being maintained.

Harvest Management – This commitment was met and is being maintained. Harvest impact rates to naturally produced OC Coho Salmon from fisheries continue to be managed through the PFMC's Salmon Fishery Management Plan and the Amendment 13 Harvest Management Matrix, found by NOAA-Fisheries to be consistent with recovery of OC Coho Salmon. In 2024, the maximum allowed exploitation rate for north, north-central, and south-central stock components of Oregon Coast Natural (OCN) coho was 30.0%. Preliminary postseason estimates of combined marine and freshwater exploitation for the three stock components were lower than the limit at 19.0%, 21.8%, and 24.8%, respectively.

Western Oregon Stream Restoration Program – This commitment is on-going. Budget constraints in previous years had reduced the number of ODFW biologists supporting this program to two positions (North Coast and Umpqua). Recently, increased funding allowed

ODFW to restore two positions (Mid-Coast and Mid-South Coast). These biologists provide a significant amount of support in coordinating, planning, and implementing priority actions to address limiting factors (https://www.dfw.state.or.us/habitat/wosrp.asp).

High priority habitat restoration projects that create OC Coho Salmon rearing habitat continue to be developed and implemented by various entities across the ESU. Priority is placed on projects with willing landowners in areas capable of supporting high quality rearing habitat. Technical assistance is being provided to local partners, and new restoration techniques for addressing key limiting factors are continually being explored. The Coast Coho Partnership has completed Strategic Action Plans (SAPs) for coho populations in the Siuslaw, Coos, and Nehalem watersheds, and SAPs are in development for coho populations in the Siletz, Tillamook, Coquille, and South Umpqua watersheds. Two partnerships that developed SAPs (Siuslaw Coho Partnership and Coos Basin Coho Partnership) have been awarded funding through the Oregon Watershed Enhancement Board (OWEB) Focused Investment Partnership (FIP) grant program. The OWEB Investment Tracking Tool can be used to explore activities funded by OWEB grants in the OC Coho Salmon ESU. The Oregon Watershed Restoration Inventory provides more detailed information on completed restoration projects.

Implementation of the Private Forest Accord also continued in 2024. The Private Forest Accord Grant Program funded 23 projects totaling over $10 million, including several restoration projects that will directly benefit OC Coho Salmon. In addition, ODFW PFA Biologists 1) assisted private forest landowners with on-the-ground implementation of Forest Practices rules, including determinations of fish presence, flow permanence, stream classification, and aquatic organism passage; 2) provided training on surveys for fish presence and flow permanence; 3) advised landowners on stream restoration priorities to enhance aquatic and riparian habitat on private forest lands; and 4) provided support to landowners to promote beaver conservation, as well as non-lethal actions to reduce conflicts with beavers.

Habitat Protection – This commitment is on-going. ODFW staff continue to work collaboratively with state and federal permitting agencies to provide comments and alternatives to permitted habitat altering activities (e.g., fill and removals) that minimize or eliminate the loss of fish habitat.

Promote Beaver Dams and Associated Habitat – This commitment is on-going. In 2024, ODFW continued implementation of a Three-year Action Plan for Beaver-Modified Landscapes (link) that outlines the goals and strategies ODFW will use to advance the protection and restoration of beaver habitat and beaver-modified habitat in Oregon.

Research, Monitoring and Evaluation – This commitment is on-going. ODFW continues to conduct research, monitoring, and evaluation related to the OCCCP through Oregon Plan for Salmon and Watersheds monitoring programs, research partnerships, and other collaborative efforts.

Conservation Plan Outreach – This commitment is on-going. ODFW has designated staff to coordinate with key partners on actions to address the objectives in the OCCCP.