

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON SALMON INSEASON MANAGEMENT MEASURES

At the Council's March 2023 meeting under Agenda Item D.3., to Identify Management Objectives and Preliminary Definition of 2023 Management Alternatives, the California Department of Fish and Wildlife (CDFW) recommended that the 2023 range of alternatives developed for analysis include a framework that would allow the ability to manage California commercial and sport ocean fisheries inseason, consistent with the Pacific Coast Salmon Fishery Management Plan, in order to keep catches within forecasted projections of harvest and/or impacts.

The utility that would be gained by employing use of inseason measures has become apparent in recent years, as California commercial ocean harvests have considerably exceeded pre-season projections of ocean exploitation rates and catch which may be a contributing factor in exceeding Endangered Species Act (ESA) consultation standards, falling short of predicted harvests in other sectors, and under-attaining expected escapements. Inseason fishery management tools exist that can help assure that catches will remain within those projections, including vessel-based limits, bag or landing limits, area closures, time closures, or adjustments to season dates.

The recommendations in this report build upon those oral remarks, and on written recommendations provided by CDFW to the Council at its November meeting ([November 2022, D.3.a](#)). CDFW notes that although the 2023 salmon season alternatives developed during the March meeting and approved by the Council for public review did not include any California sport or commercial ocean fishery openers for 2023, the Final Preferred Alternative adopted by the Council at this meeting is very likely to include a number of season openers in April or May of 2024. Those openers, and the regulations prescribing and defining the associated management framework, would be published as part of National Marine Fisheries Service's (NMFS)' Annual Management Measures rule that is expected to be effective for May 16, 2023 through May 15, 2024. Once new stock forecast information is available, these pre-scheduled springtime openers would be reviewed by management entities and advisory bodies at the Council's March and April 2024 meetings, and routine inseason consideration would be given as to whether adjustments to those start dates or measures are warranted.

Ocean and river fisheries are planned based on expected performance in terms of both effort and harvest, and with expectations that fish designated for escapement will escape. However, in post-season reviews of ocean fishery performance over recent seasons, there has been better-than-predicted performance of the California commercial troll fishery, with catches between two and three times higher than pre-season predictions. Prior to the recent five years, high catch rates might suggest that there are more adult fish in the ocean than the forecasts indicated, however, contemporarily no other metrics suggest the abundance of California stocks is higher than predicted – quite the contrary. California ocean sport fishery performance, in-river fishery performance, and realized escapement to the Central Valley and Klamath Basins have not met pre-season predictions, and in many cases has fallen well short of pre-season expectations.

Of substantial concern to CDFW is that California's largest Chinook Salmon stocks have consistently failed to attain the Fishery Management Plan's minimum escapement goals. Sacramento River Fall Run Chinook escapement has failed to meet the conservation objective of the minimum of the goal range of 122,000 adults in the last six of eight years. Klamath River Fall Chinook escapement has failed to meet the conservation objective for natural area adults in the last seven of eight years.

Moreover, repeated and significant exceedances of the Age-4 Klamath Ocean Impact Rate cap of 16 percent have occurred, the consultation standard established to protect ESA-listed California Coastal Chinook. As NMFS references in its March 2023 guidance letter, inseason management tools are expected to assist with meeting preseason projections and therefore more likely to achieve conservation objectives ([March 2022, D.3.b](#)).

CDFW is also mindful of the role of the pre-season process – where stakeholders and agency representatives are using the best-available scientific information to negotiate sharing arrangements and other agreements surrounding fishing opportunity, considering the priorities of individual fishery sectors and coastal communities and when and where fishing opportunity is most valuable. Meanwhile there is inherent cultural and intrinsic value of salmon resources to citizens, states and nations that must also be considered. When pre-season projections of catch or adult escapement are not realized, there are real costs and consequences to the fishing communities and sectors who were depending on that catch to materialize, and when predicted escapement fails to occur, there are real risks to the cohort those spawning adults were expected to produce. Inseason management can help ensure that these expectations, which underlie the fishery planning negotiations between sectors and interests, and which culminate into the Final Alternative, will stand a better chance of coming to fruition.

Projections of total mixed-stock catch in California's commercial and recreational fisheries become available for each year during the pre-season process and are derived from extrapolations of outputs from both the Sacramento and Klamath harvest models once season dates are selected. Those projected catches would be the basis for comparing with near-real time catch information as it becomes available inseason.

For the commercial troll fishery, CDFW recommends defining vessel-based landing and possession trip limits pre-season, with the ability to modify inseason. Trip limits would be prescribed for a defined fishing period, e.g., the fishing period might be weekly, Thursday-Wednesday, like limits used in Oregon and Washington's fisheries or might also be set as a total for fishing periods of consecutive days when the fishery is open, that may be less or more than a week long. The vessel-based landing and possession limit or number of remaining open fishing days in the season could be reduced (including fishery closure) if current catch estimates exceed preseason expectations. The initial trip limits would be part of the management measures recommended by the Council to NMFS for adoption in federal regulation. The season dates for which vessel trip limits would be established would be informed by the Salmon Advisory Subpanel and would be evaluated by the Salmon Technical Team and published in the analyses available in Pre-II and Pre-III. These initial limits would then be subject to inseason review and reduction if needed, as catch or other information becomes available.

For recreational fisheries, CDFW recommends the ability to modify the bag limit or fishing season dates inseason to keep catches within pre-season catch projections. CDFW is evaluating the use of sampling procedures similar to methods employed by CDFW in coordination with NMFS and other co-managing agencies for Pacific Halibut and constraining groundfish species to assess the recreational fishery inseason to determine if inseason actions in the recreational fishery might be necessary. CDFW and NMFS are continuing to evaluate the feasibility of this approach for the salmon fishery and will complete that work prior to the preseason planning for the 2024 salmon fishing season.

CDFW would rely on information collected in its ocean fishery monitoring programs to collect catch and effort data in the ocean sport and commercial fisheries as they are happening. CDFW's Ocean Salmon Project (OSP) employs up to 20 dedicated seasonal employees that monitor the commercial and charter boat fisheries at 13 and 15 primary salmon sample sites, respectively, when seasons are open. Additionally, CDFW's California Recreational Fisheries Survey (CRFS) is a comprehensive, statewide creel census monitoring program that involves deployment of up to 70 seasonal samplers who monitor launch ramps and charter vessels to collect catch and effort information on salmon and other species taken and targeted in recreational fisheries across the state of California.

To ensure the most real-time information is available for use inseason, CDFW further recommends that the federal salmon regulations specify that any California commercial landing receipt with salmon listed shall be submitted to CDFW within 24 hours, similar to the federal requirement for Pacific Bluefin Tuna, Sablefish and fish landed as part of the West Coast Groundfish Individual Fishery Quota program.

CDFW appreciates the coordinated work with NMFS in recent months to develop both the mechanisms and the potential regulatory language necessary to make inseason measures available for use beginning with the 2023-24 annual management measures.