

CALIFORNIA DEPARTMENT OF FISH & WILDLIFE REPORT ON  
SOUTHERN OREGON/NORTHERN CALIFORNIA COAST COHO  
AD HOC WORKGROUP RISK ASSESSMENT

Agenda Item F.3.a, Supplemental SONCC Workgroup Report 1, September 2021, presents new content in response to Council direction given at the June meeting, including: (a) risk assessment modeling results for ten fixed, total exploitation rate (ER) harvest control rules (HCR) or limits, ranging 0-20%; (b) a preliminary quantitative assessment of how frequently each HCR might constrain fisheries in the future; and (c) an overview of how a total ER-type HCR, which includes both ocean and freshwater fishery-related mortality, could be implemented in practice, given existing limitations of data, modeling tools, and reporting timelines. This document, which is the fourth version of this report, is expected to inform the pending revision of the SONCC Biological Opinion and Incidental Take Statement under development by NMFS Protected Resources Division.

Additionally, the report includes recommendations that may help improve stock assessment and management for SONCC coho salmon into the future. While this edition provides the Council with new information to support the identification of a preliminary preferred alternative (PPA), the California Department of Fish and Wildlife (CDFW) believes the report is lacking information in two critical areas that impede the selection of a PPA during the September 2021 Council meeting:

**Concern 1:** The report does not include sufficient information about the allowable impact rate that each HCR alternative would ultimately set for ocean fisheries. This is because NMFS is engaged in separate ESA consultations on in-river Tribal fisheries within the Klamath and Trinity basins, which may effectively set a limit for much of the freshwater subset of a total ER impact limit, outside of the Council workgroup process. This is problematic because the impact limit that will be allocated to these freshwater fisheries remains unknown, yet is one of the variables comprising each of the ocean + inland impact alternatives. This means the ocean portion (i.e., the total minus freshwater remainder) of each candidate total ER HCR is also unknown.

If the Council were to select a PPA at this meeting from among the 10 HCRs reviewed in the workgroup report, it would be doing so without knowing the limit available to the fisheries under its jurisdiction. CDFW believes that progress towards a refined range of alternatives or final preferred alternative will therefore remain at an impasse until further information on freshwater impact limits becomes available.

**Concern 2:** Beyond better understanding the level of impact that each HCR provides to ocean fisheries, CDFW, the Council, and stakeholders need more information on how each HCR might affect fisheries in the future. Part 7 of the report does include new content that depicts *how often*

each HCR might trigger fishery constraints (uncertainty about the available ocean portion, noted above [Concern 1], notwithstanding); however, it does not provide information about *where*, *when*, or *to what degree* reductions in fishing may be required to achieve conservation objectives. While it is acknowledged that painting this more detailed picture is a complex task, given that SONCC coho salmon are primarily impacted in non-directed (i.e., Chinook and/or mark-selective coho) fisheries, sufficient information should be available on the assumed time-area-sector distribution of impacts (e.g., from post-season runs of the coho FRAM model) to provide a quantitative evaluation of anticipated impacts by region and fishery, possibly at target fishing activity levels that equate to full fishing opportunities.

CDFW additionally notes that the current impact limit, a 13% ER in ocean fisheries, has not been exceeded for decades. In contrast, plausible ocean ER components of the HCRs being considered—for example 7.5%, or half of a 15% total ER limit—could trigger new ocean fishery restrictions in one out of every three to five years. Given that the Council’s purview is ocean salmon fisheries 3-200 miles from shore, more analysis of candidate HCR effects on ocean fisheries is needed to inform the Council’s selection of a final alternative, or a revised range of alternatives.

CDFW recommends that the workgroup be tasked with developing and presenting this information in its next report. CDFW also recommends that the next report include content describing the coho FRAM model, as it is becoming increasingly clear that this tool will play a significantly more influential role in pre-season ocean fishery planning and assessment, particularly in California and southern Oregon. This section of the workgroup’s report should include a brief description of the model’s base period data (CWT groups), non-retention algorithms, and application in both pre- and post-season settings to project or estimate impacts on SONCC coho salmon.