

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
HARVEST SPECIFICATIONS FOR 2023-2024 INCLUDING FINAL OVERFISHING
LIMITS AND ACCEPTABLE BIOLOGICAL CATCHES

The Scientific and Statistical Committee (SSC) reviewed the 2023 and 2024 groundfish harvest specifications under default harvest control rules ([Agenda Item E.3, Attachment 1](#)) and made some corrections. The harvest specifications for Oregon quillback rockfish have changed from those previously reviewed due to an assumed lower catch in 2022, as the Oregon Department of Fish and Wildlife will be implementing non-retention regulations. Catch-only projections for black rockfish ([Agenda Item E.3, Attachment 3](#)) were presented for two scenarios that differed according to the timeframe for which acceptable biological catches/annual catch limits (ACLs) of 512 metric tons (mt) were assumed (2021-2022 vs 2021-2024). For both scenarios previously assumed catch projections for 2019 and 2020 were replaced with the lower observed catches for those years. Additional harvest specifications for lingcod, sablefish, spiny dogfish, and vermilion/sunset rockfishes were reviewed ([Agenda Item E.3, Attachment 4](#)). The SSC noted that a category 2 designation for vermilion and sunset rockfishes for the Northern California model was incorrectly used in this projection as well as in [Agenda Item E.3.a, GMT Report 1](#). These projections will be updated to reflect the category 1 designation assigned and corrected in the PacFIN database. The California quillback rockfish projections were updated to reflect the 40-10 harvest control rule.

The SSC endorses the catch specifications now that the suggested corrections have been made (a supplemental revised Attachment 1 is anticipated). In addition, the SSC endorses the alternative projections in Attachments 3 and 4 except for those in Table 6 Attachment 4 (projections for Northern California vermilion/sunset rockfish).

Dr. Brian Langseth (Northwest Fisheries Science Center) provided the SSC with an update to a presentation from a Groundfish Subcommittee (GFSC) meeting held via webinar on September 29-30, 2021 that focused on available information to determine stock management delineation for copper and quillback rockfish off the U.S. West Coast. The new information was primarily related to quillback rockfish, which was found to differ very little from that for copper rockfish. In general, adult quillback rockfish exhibit limited observed movements with high site fidelity. There is little understanding of larval dispersal patterns for these species, which is likely the mechanism by which mixing would occur given evidence for limited adult movement. However, minimal genetic variation between Washington and Alaska has been observed, which suggests the potential for broad scale larval dispersal. The only notable genetic differences observed occur between Puget Sound and coastal regions. Estimated recruitment deviations for quillback rockfish showed some unquantified degree of spatial coherence. However, this alone does not necessarily imply connectivity during the larval stage as broad scale environmental forcing could be responsible.

The SSC had extensive discussions about when to aggregate assessments across stock delineation boundaries for status determination. During these discussions, at least three tiers of information to consider were evaluated. The highest tier is a genetic difference among meaningful markers which has not been demonstrated for quillback or copper rockfish. The next highest tier of information is exchange or movement of adults, followed by larval dispersal between areas. For both copper and quillback rockfish, adults exhibit high site fidelity and the magnitude of larval dispersal is uncertain. The lowest tier of information the SSC discussed was demographic differences such as

size at age. The available data for these species do not suggest strong coast-wide differences in size at age. There appears to be differences in selectivity patterns between commercial and recreational fleets that is stronger than selectivity patterns between states.

The SSC recommends for quillback rockfish that three separate stock areas be maintained for status determination: California, Oregon, and Washington. For copper rockfish, the SSC recommends a reduction to two stock areas: pooling the biomass estimates from Southern and Northern California assessments to determine status in California and pooling the biomass estimates from the Oregon and Washington assessments for a northern area status determination. For sunset/vermillion rockfish, separate stock areas should be assumed for status determination for the Southern and Northern California assessments because of the presence of sunset rockfish primarily south of Point Conception. The Oregon and Washington assessments should be combined into a single stock area because of the lack of population structure within vermillion rockfish at the northern extent of its range. The SSC notes there is considerable uncertainty regarding stock structure for the three species and that additional data may clarify the situation. The SSC reviewed and endorsed methods for catch allocation between regions. The SSC re-iterates that harvest should be spatially allocated proportional to relative biomass to reduce risk owing to stock structure uncertainty, particularly for the copper rockfish off California.

Mr. John DeVore (Council staff) provided a presentation on background and context for structuring groundfish stock complexes. GMT members were available to discuss their report on the topic ([Agenda Item E.3.a, GMT Report 2](#)). The SSC thanks the GMT for their carefully constructed report on this topic, especially given the limited timeframe, and Mr. DeVore for his concise presentation.

While recognizing that data limitations and the nature of co-occurring stocks are the primary reason to continue to use stock complexes for management, current concerns include:

1. “Inflator stocks” which have large overfishing limit (OFL) and ACL contributions to complexes, yet catches that are lower than their ACL contributions.
2. Stocks where catches consistently exceed OFL contributions within complexes, including:
 - a. Those that need management action
 - b. Those that are caught primarily in areas outside the complex, and where coastwide management might be a better approach.
3. Stocks without OFL contributions and where targeting and retention of the species are not expected. These could be considered for designation as Ecosystem Component (EC) species.
4. Stocks with, or anticipated to have, an overfished designation

Responses to the above issues could include removing stocks from complexes and managing as individual stocks or designating as EC species, adding accountability measures, and/or prioritizing stocks for assessment, as appropriate. Impacts of such changes to quota shares should be considered in weighing alternative actions, and in general, proposed changes to complexes should consider broader management implications.

The SSC recommends management action to address the stocks with catches exceeding OFL contributions highlighted in [Agenda Item E.3.a, GMT Report 2](#) as well as copper rockfish south of Point Conception due to new assessment results. In addition, given the anticipated overfished

declaration for quillback rockfish off California, the SSC recommends that stock be removed from complexes and managed separately to facilitate rebuilding.

PFMC
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