

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
SALMON METHODOLOGY REVIEW—FINAL TOPIC SELECTION AND UPDATE ON
MODEL IMPROVEMENTS

Dr. Michael O’Farrell (Salmon Technical Team, STT) and Mr. Jon Carey (STT) briefed the Scientific and Statistical Committee (SSC) on five proposed topics for the 2022 Salmon Methodology Review scheduled for October 12-13, 2022. The five topics listed in the Situation Summary are anticipated to be ready for review and the SSC supports reviewing all five. The topics and parties responsible for providing documentation are:

1. Technical review of the updates associated with ‘Round 7.1.1’ of the Fishery Regulation Assessment Model (FRAM) base period as they relate to modeled abundances of Chinook salmon stocks used in determining the southern resident killer whale (SRKW) Chinook salmon abundance threshold. This review will be informed by a document that summarizes the changes to the FRAM that impact the SRKW Chinook salmon abundance threshold and will be led by the Model Evaluation Workgroup (MEW) with support from the Washington Department of Fish and Wildlife (WDFW), Northwest Indian Fisheries Commission (NWIFC), and National Oceanic and Atmospheric Administration (NOAA).
2. Technical review of the updates to Chinook salmon ocean distribution models that derive from two publications (Shelton et al. 2019, 2021) and are used to apportion the modeled abundance of Chinook salmon stocks among ocean regions. This review will be informed by an additional document that summarizes changes between the 2019 and 2021 models that impact modeled Chinook salmon stock apportionment, and this document will be prepared by the Northwest Fisheries Science Center.
3. Discussion of whether the Sacramento Index forecast should be expressed as a mean or median. This review will evaluate a document that discusses expected type and magnitude of errors and management performance associated with expressing this point estimate as a mean or median. This document will be prepared by the Southwest Fisheries Science Center.
4. Review of the basis behind the Sacramento River Fall Chinook conservation objective. This review will be based on a document that reviews the literature used to develop the Sacramento River Fall Chinook conservation objective and the SSC recommends that it should incorporate information from more recent studies as appropriate. Document preparation will be led by the Southwest Fisheries Science Center.
5. FRAM technical detail documentation. This review will consist of an update of the online-based documentation of the FRAM model reviewed in previous cycles and will be led by the MEW with support from WDFW, NWIFC, and NOAA.

Materials submitted for review should be technically sound, comprehensive, clearly documented, and identified by author. Materials to be reviewed should be submitted no later than two weeks prior to the review. If this deadline cannot be met, it is the responsibility of the author to contact Robin Ehlke – Salmon Staff Officer, the SSC Salmon Subcommittee Chair, and the STT Chair prior to the deadline, so appropriate arrangements, rescheduling, and cancellations can be made in a timely and cost-effective manner. The SSC plans to review reports on these topics at the November 2022 Council meeting.