# SALMON TECHNICAL TEAM REPORT ON THE 2025 KLAMATH RIVER FALL CHINOOK *DE MINIMIS* EXPLOITATION RATE

For 2025, the Klamath River fall Chinook (KRFC) harvest control rule specifies a *de minimis* maximum allowable exploitation rate of 10 percent. The Salmon Fishery Management Plan (FMP) requires consideration of several factors when recommending *de minimis* exploitation rates. From the Salmon FMP:

"When recommending an allowable *de minimis* exploitation rate in a given year, the Council shall also consider the following circumstances:

- The potential for critically low natural spawner abundance, including considerations for substocks that may fall below crucial genetic thresholds;
- Spawner abundance levels in recent years;
- The status of co-mingled stocks;
- Indicators of marine and freshwater environmental conditions;
- Minimal needs for tribal fisheries:
- Whether the stock is currently in an approaching an overfished condition;
- Whether the stock is currently overfished;
- Other considerations as appropriate."

The Salmon Technical Team has assessed these circumstances, with the exception of minimal needs for tribal fisheries.

#### Potential for low spawner abundance

The potential for critically low natural spawner abundance could be considered high. The 2025 minimum natural-area adult spawner escapement of 19,417 adults is lower than the minimum stock size threshold (MSST; 30,525) and  $S_{MSY}$  (40,700 natural-area adult spawners). A natural-area adult escapement of 19,417 adults would represent the seventh lowest value over the past 49 years of data.

## Substocks

To assess the potential for critically low abundance of substocks, a statistical model (<u>PFMC 2007</u>, Appendix D) was applied to historical run size data to assess the probability that escapement to either the Salmon, Scott, or Shasta rivers would fall below 720 adults, given a total, basin-wide natural area escapement of 19,417 adults in 2025. The 720 adult escapement threshold for these substocks was based on effective population size (genetic) considerations. Application of the model suggested that at least one of the substocks would fall below the 720 adult threshold with a probability of 0.56.

### Recent spawner abundance

The natural-area adult spawner escapement has been lower than the MSST in eight of the last ten years and four of the last five years. The 2025 forecast of natural-area adult spawners in the absence of fishing is 20,763 adults, which is lower than  $S_{MSY}$  and the MSST. If fishing seasons are structured such that the maximum allowable exploitation rate of 10 percent is met, the natural-area adult spawner expectation is 19,417, which is lower than the MSST and  $S_{MSY}$ .

#### Comingled stocks

With regard to co-mingled stocks, Sacramento River fall Chinook have a low abundance forecast and are likely to constrain ocean fisheries in 2025. SONCC coho may also constrain 2025 ocean fisheries in California and Oregon.

Indicators of marine and freshwater environmental conditions

The 2024-2025 California Current Integrated Ecosystem Assessment (CCIEA) Ecosystem Status Report (CCIEA 2025) provides indicator-based outlooks for KRFC for the 2025 and 2026 return years. The indicator-based outlook is "consistent with low returns in 2025". Appendix J of the CCIEA report provides more detailed information on the habitat indicators relevant to the 2025 return year.

# Approaching an overfished condition

KRFC currently meets the criteria for being at risk of approaching an overfished condition.

### Overfished status

KRFC was declared overfished following the 2017 escapement and continues to meet the criteria for overfished status in 2025.

#### Reference:

PFMC. 2007. Final Environmental Assessment for Pacific Coast Salmon Plan Amendment 15: An Initiative to Provide for De Minimis Fishing Opportunity for Klamath River Fall-run Chinook Salmon. (Document prepared by the Pacific Fishery Management Council and National Marine Fisheries Service.) Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384. 3 https://www.pcouncil.org/actions/amendment-15-an-initiative-to-provide-de-minimis-oceanfishing-opportunity-for-klamath-river-fall-chinook/

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