

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
PACIFIC SARDINE ASSESSMENT, HARVEST SPECIFICATIONS, AND
MANAGEMENT MEASURES FOR 2025-2026 – FINAL ACTION

The Scientific and Statistical Committee (SSC) reviewed the 2025 stock assessment update ([Agenda Item G.3 Attachment 1](#)) for the northern subpopulation (NSP) of Pacific sardine and the SSC Coastal Pelagic Species Subcommittee (CPSSC) [report](#) from their February 26, 2025 meeting that reviewed the draft assessment and related documents. Caitlin Allen-Akselrud (Southwest Fisheries Science Center) presented the results of the stock assessment and André Punt (SSC, CPSSC Chair) provided an overview of the Subcommittee report. The SSC also discussed an updated analysis of the relationship between Pacific sardine recruitment and sea surface temperature ([Attachment 2](#)), which is reported on by the SSC under Agenda Item G.5.

Update Assessment and 2025-2026 Harvest Specifications

The stock assessment update was based upon the 2024 full assessment, with updated catch data for 2023 and new data for 2024. Genetic sampling revealed the presence of Japanese sardine in NSP habitat in 2022, 2023, and 2024. There have been no attempts to separate biomass or age/size compositions by species, and the assessment includes the biomass of both species.

The Stock Assessment Team (STAT) and CPSSC extensively discussed whether to include the age and conditional weight-at-age samples from the 2024 Acoustic Trawl (AT) survey. Most of these data came from 98 individuals from two purse seine sets, and a substantial proportion were genetically identified as Japanese sardine. Excluding these data would require projecting 2024 recruitment from the mean spawner-recruit relationship, leading to an estimated 2024 recruitment that was substantially higher than recent estimated recruitments from years informed by data. Japanese sardine are included in the biomass estimate from the assessment, and the 2024 sampling was deemed sufficiently representative of the assessed “stock”. Inclusion of the 2024 AT survey age and weight-at-age data is consistent with the default approach for an update assessment. Including these data resulted in a 2024 recruitment projection that was more consistent with recent recruitment estimates, and the STAT and CPSSC ultimately agreed to include them.

The SSC agrees with the CPSSC that the 2025 update to the 2024 sardine assessment satisfies the Terms of Reference for update assessments. The results are adequately consistent with the previous assessment given the new data, and represent the best scientific information available for management of the NSP Pacific sardine. The SSC recommends that the assessment be designated as [category 2d](#) based on the uncertainties related to the presence of Japanese sardines, difficulties modeling weight-at-age, and the uncertainties previously noted in the review of the 2024 full assessment ([April 2024 Agenda Item I.3 Supplemental SSC Report 1](#)).

The SSC endorses the model estimate for age-1+ biomass on July 1, 2025 of 30,158 mt ([Table ES.2 of Attachment 1](#)). Based on application of the Harvest Control Rule (HCR) with a [temperature-dependent \$E_{MSY}\$](#) of 0.1771 and a constant DISTRIBUTION term of 0.87, the SSC endorses the corresponding overfishing limit (OFL) of 4,645 mt.

[Table ES.4 of Attachment 1](#) provides the ABC values for P* alternatives that may be selected by the Council, using the ABC_{Tier 2} row. The SSC endorses the use of this table for determining the ABC corresponding to the Council's choice of P* from that row.

The OFL calculation uses the status quo approaches to E_{MSY} and DISTRIBUTION. These topics are addressed further by the SSC under Agenda Item G.5. For E_{MSY} , Attachment 2 provides the first of many steps toward potentially updating E_{MSY} for Pacific sardine, but does not compel a change at this time. The DISTRIBUTION term (representing the proportion of the NSP stock in U.S. waters) was derived based on the previous approach to separating NSP from the southern subpopulation. This, along with the recent lack of Mexican catch attributed to NSP, could suggest revising the value of DISTRIBUTION. The best approaches for specifying E_{MSY} and DISTRIBUTION depend on how stocks are defined for management.

Planning for 2026-2027 Harvest Specifications and Future Assessments

In November 2024 ([Agenda Item J.3](#)), the Council prioritized a review of the Integrated West Coast Pelagics Survey over a Pacific sardine assessment for 2026. If no assessment is performed for Pacific sardine in 2026, the SSC will consider any new information provided at the April 2026 meeting, along with the results of the update assessment endorsed in 2025. Rolling over the OFL from the 2025 update assessment is one option (as was done in 2023, [April 2023 Agenda Item H.4.a Supplemental SSC Report 1](#)). Any new information, along with the time since the last full assessment (2024), will be considered in determining the appropriate E_{MSY} and OFL, and in setting sigma to reflect the current level of uncertainty. There could be value in frameworking a consistent approach for dealing with CPS harvest specifications in the absence of an assessment, as discussed further under Agenda Item G.5.

The SSC agrees with the STAT recommendation to explore the use of a stock-recruit regime parameter for Pacific sardine in the next full assessment. The SSC is generally supportive of careful thinking about the most supportable and most risk-neutral ways of characterizing projected recruitment in short-lived species where projected recruitment makes a large contribution to the assessment of fishable biomass.

PFMC
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