COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON FISHERY MANAGEMENT PLAN AMENDMENT—SARDINE STOCK DEFINITION AND FISHERY MANAGEMENT UNIT REVISION

The Coastal Pelagic Species Management Team (CPSMT) reviewed the documents under Agenda Item F.5 for Pacific sardine. The CPSMT recommends adoption of Alternative 1, the preliminary preferred alternative, as the interim final preferred alternative (iFPA), to include all Pacific sardine in U.S. waters in the CPS Fishery Management Plan (FMP) Fishery Management Unit.

As stated in our November 2025 report (Agenda Item J.3.a Supplemental CPSMT Report 1), the CPSMT finds that Alternative 1 reflects the best scientific information available (BSIA, National Standard 2). Advanced genetic analyses show no differentiation between the purported subpopulations of Pacific sardine (Longo et al. 2025). Comprehensive literature reviews found no support for a two-subpopulation model, and instead revealed broad movement capabilities, spatiotemporally protracted spawning, lack of spatially discrete otolith shape or chemical composition, undifferentiated growth rates, hypervariable length-at-age distributions, and no differences in meristics or morphology in Pacific sardine from the northeastern Pacific (Craig et al. 2025; Erisman et al. 2025).

The CPSMT agrees with the Council staff document (F.5 Attachment 1) that a comprehensive amendment to revise the Pacific sardine stock definition should include a review of all necessary reference points to achieve optimum yield and prevent overfishing while considering the importance of sardine in the California Current Ecosystem. The CPSMT supports the 2026 next steps in the Action & Management Timeline (F.5 Supplemental Attachment 2) to amend the CPS FMP under the iFPA. The CPSMT appreciates the ability to actively participate in the proposed review of sardine management provisions with other advisory bodies to inform the Council at the September 2026 meeting. The CPSMT prefers that this review occurs in person in late July or early August 2026.

The CPSMT questions the benefit of a 2027 benchmark or update assessment of "northern subpopulation" sardine. Resources should instead be applied toward informing any review of reference points and developing a coastwide stock assessment as soon as possible to align management with BSIA. The CPSMT recommends that a coastwide (U.S. waters) benchmark stock assessment be conducted in 2027. If a coastwide benchmark assessment is necessary to inform a management strategy evaluation (MSE), and a review of the required management provisions deems an MSE necessary to evaluate management alternatives for the iFPA (F.5.a Supplemental SSC Report 1), the CPSMT is concerned that waiting until 2028 for a coastwide assessment would delay final action. The CPSMT sees value in developing a framework for survey-based harvest control rules for management flexibility when sardine stock assessments cannot be conducted due to stock assessment prioritization or time or resource constraints.

References

Craig, M.T., Erisman, B.E., Adams-Herrmann E.S., James, K.J., and Thompson, A.R. 2025. The subpopulation problem in Pacific sardine, revisited. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-713. https://doi.org/10.25923/zzvw-x557

Erisman, B., Craig, M., James, K., Schwartzkopf, B., & E. Dorval. 2025. Systematic review of somatic growth patterns in relation to population structure for Pacific Sardine (*Sardinops sagax*) along the Pacific Coast of North America. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-708. https://doi.org/10.25923/0j1j-xv61

Longo, G. C., D′Amelio K., Larson, W., Enciso-Enciso, C., Torre, J., Minich, J.J, Michael, T.P., and Craig, M.T. 2025. Population genomics reveals panmixia in Pacific sardine (*Sardinops sagax*) of the North Pacific. Evolutionary Applications 18, no. 9: e70154. https://doi.org/10.1111/eva.70154.

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