

COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON PACIFIC SARDINE STOCK DEFINITIONS

The Coastal Pelagic Species Management Team (CPSMT) discussed a Council report on reviewing the CPS Fishery Management Unit (FMU), including a proposed Purpose and Need Statement and Range of Alternatives (ROA) ([Agenda Item J.3 Attachment 1, November 2025](#)). In November 2024 and April 2025, the CPSMT expressed support for research on stock structure and accounting for all Pacific sardine (*Sardinops sagax*) ([C.6.a Supplemental CPSMT Report 1, G.5.a Supplemental CPSMT Report 1](#)). The CPSMT recognized that the “stock assessment attributed a high percentage of the live bait catch to the southern subpopulation,” and that the “absence of in-season catch accounting to the appropriate subpopulation has been an ongoing issue for several years” ([C.6.a Supplemental CPSMT Report 1](#)).

Purpose and Need Statement

The CPSMT proposes a revised Purpose and Need Statement (below) to reflect that at this time there is insufficient information to recommend that Japanese sardine (*Sardinops melanosticta*) be added to the FMU. This species has only been detected in U.S. waters in recent years, and it is unknown whether this species will persist in U.S. waters and how it is interacting with Pacific sardine.

Due to the increased presence and catches of Pacific sardine designated as southern subpopulation and newly published research on the population structure of Pacific sardine, this action aims to reevaluate the FMU for sardine in the CPS Fishery Management Plan (FMP). Specifically, the action will determine if the sardine stock is appropriately identified, whether the stock identification should be adjusted, or whether an additional stock needs to be moved into the FMP.

This action is necessary to ensure Pacific sardine conservation and management is consistent with the goals and objectives of the Magnuson-Stevens Act, the National Standards (NS), and the CPS FMP.

Range of Alternatives

The ROA is also revised as below, removing option (a) to add Japanese sardine to the FMU from both alternatives. Also, under Alternative 2, the word “subpopulations” was replaced by “stocks” to reflect the current science available on the Pacific sardine population, as described in [Agenda Item J.3 Attachment 1](#).

No Action - The Council would not define stocks other than those currently defined in the CPS FMP (Section 1.2, Table 1-1). Only the northern subpopulation of Pacific sardine would continue to be defined as a stock in the FMU.

Alternative 1 - The Council would amend the CPS FMP (Section 1.2, Table 1-1) to include all Pacific sardine in U.S. waters in the FMU. The FMU would include one stock of Pacific sardine, delineated coastwide.

Alternative 2 - The Council would amend the CPS FMP (Section 1.2, Table 1-1) to include all Pacific sardine in U.S. waters in the FMU. The FMU would include two stocks of Pacific sardine, delineated by northern and southern stocks.

Japanese sardine — Although the CPSMT does not recommend considering an alternative that adds Japanese sardine to the FMU at this time, this should not preclude the species from future management and assessment considerations as new data become available. The CPSMT supports continued research on Japanese sardine in U.S. waters.

Preliminary Preferred Alternative

The CPSMT recommends Alternative 1 as a preliminary preferred alternative. The CPSMT finds that this alternative reflects the best scientific information available (NS 2) based on recent analyses showing no genetic differentiation between the purported subpopulations of Pacific sardine, and recent literature reviews revealing a lack of scientific evidence to support two subpopulations. For the reasons described in Attachment 1, all Pacific sardine in U.S. waters need conservation and management per MSA 50 CFR 600.305(c).

Managing sardine as a single stock under Alternative 1 would streamline catch accounting compared to managing two separate stocks under Alternative 2, since all sardine harvests would be applied to a single annual catch limit. Likewise, survey data would not require post-hoc apportionment. These efficiencies make Alternative 1 a more effective and practical framework for conservation and management of the Pacific sardine resource.

Although recent scientific information supports one biological population for Pacific sardine (Adams and Craig 2024, Craig et al. 2025, Erisman et al. 2025, Longo et al. 2025), there are regional differences in distributions of age classes (e.g., older fish are seasonally more abundant in the north) because of ontogenic and feeding migrations (Erisman et al. 2025). Additionally, spawning and recruitment is primarily in the south and provides recruits to the north via migration, but infrequent local spawning can occur in the north. If sardine are managed as one stock, management could take into account these regional differences while still recognizing they are from the same single population.

References

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- Erisman, B., Craig, M., James, K., Schwartzkopf, B., and Dorval, E. 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., et al. 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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