FISHERY MANAGEMENT PLAN AMENDMENT: MANAGEMENT PROVISIONS FOR THE REVISED SARDINE STOCK

Considering the newly available information on Pacific sardine population structure, including genetic studies and a review of all preceding research on Pacific sardine population biology, the Pacific Fishery Management Council (Council) has determined it appropriate to revise the current stock definition for Pacific sardine, as described in the fishery management unit (FMU) of the Coastal Pelagic Species Fishery Management Plan (CPS FMP), delineating it as a single, coastwide U.S. stock, bound by the U.S. Exclusive Economic Zone (EEZ). While current management follows best scientific information available (BSIA) to date, this action seeks to revise the sardine stock definition to align with new science, revising the FMP to implement management for this stock. In November 2025, the Council adopted a purpose and need statement and range of alternatives (ROA), and preliminary preferred alternative (PPA) for the stock definition portion of this action. In April 2026, the Council also adopted an 'interim' Final Preferred Alternative (iFPA) stock definition, indicating a preferred alternative for the stock definition portion of the FMP amendment and facilitating development of a comprehensive FMP amendment to implement the revised stock definition.

Because the revised stock definition establishes a stock requiring conservation and management under the FMP, associated management provisions must also be established consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Council and National Marine Fisheries Service (NMFS) staff have reviewed the CPS FMP and existing management provisions for CPS stocks, including Pacific sardine, to identify the management provisions needed to implement the revised stock definition. In July 2026, the CPS subcommittee of the Scientific and Statistical Committee (SSC-CPSSC), the CPS Management Team (CPSMT), and representatives from the CPS Advisory Subpanel (CPSAS) met to review this work and develop initial recommendations regarding reference points and control rules for the revised Pacific sardine stock. Their recommendations are summarized in Agenda Item J.1, Attachment 2, and inform the alternatives and options proposed for Council consideration under Actions 2 and 3 of this FMP amendment.

The proposed ROA represents the full FMP amendment to revise the Pacific sardine stock definition. The amendment is organized into three connected and sequential actions:

- Action 1 addresses the stock definition and reflects the iFPA previously adopted by the Council.
- Action 2 addresses status determination criteria (SDCs) and associated reference points and control rules, including the minimum stock size threshold (MSST), overfishing limit (OFL), and acceptable biological catch (ABC).
- Action 3 addresses additional reference points and harvest control rule provisions within the CPS FMP framework, including annual catch limit (ACL) and harvest guideline (HG).

Action 1 has already been addressed by the Council and is not scheduled for further action at this meeting. The Council is being asked at this meeting to consider and potentially adopt a ROA and PPA for Actions 2 and 3, which cover the remaining required elements of a stock in an FMP. Final action on the complete FMP amendment, including the stock definition under Action 1, is anticipated in November of 2026.

<u>Proposed Range of Alternatives – FMP Amendment</u>

Action 1: Revising the Pacific sardine stock in the FMU of the CPS FMP (No Additional Council Action Needed in September 2026)

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 (iFPA) – *The Council would amend the CPS FMP (Section 1.2, Table 1-1) to define a U.S. stock of Pacific sardine in the FMU, delineated coastwide.*

The Council adopted Alternative 1 as its iFPA in April 2026. Therefore, no additional Council action on Action 1 is scheduled for September 2026. The Council will make a final recommendation on the complete FMP amendment, including Action 1, when it is scheduled to take final action in November 2026.

Under Alternative 1, "delineated coastwide" means the fishery management area (i.e., the EEZ off the coasts of Washington, Oregon, and California between 3 and 200 nautical miles offshore, bounded in the north by the Provisional International Boundary between the U.S. and Canada, and bounded in the south by the International Boundary between the U.S. and Mexico.)

Action 2: Pacific Sardine Status Determination Criteria and Related Reference Points and Control Rules

No Action – *No status determination criteria or related reference points and control rules would be adopted for the U.S. stock of Pacific sardine.*

Alternative 1 – *Status determination criteria would be adopted for the U.S. stock of Pacific sardine, per the framework outlined in Table 1.*

Table 1. Pacific sardine status determination criteria and related reference points and control rules to be applied under Action 2, Alternative 1.

FMP Element	Specification
Management Strategy	More intensive (i.e., general harvest control rule)
Overfished SDC	Biomass < MSST
a) Static Specification of MSST	MSST = X mt age 1+ biomass or reasonable proxy
b) Formulaic Specification of MSST	MSST = X%SSB_0 where X% is determined upon BSIA (bound between y and z) or other reasonable proxy
Overfishing SDC	Catch > OFL
OFL	BIOMASS * E_{MSY} * DISTRIBUTION
ABC	BIOMASS * BUFFER * E_{MSY} * DISTRIBUTION
DISTRIBUTION	1

Note, the parameters within the control rules are also included within this Alternative, as applicable. BIOMASS is generally the estimated biomass of fish age 1+ at the beginning of the season; E_{MSY} is the exploitation rate for deterministic equilibrium maximum sustainable yield (MSY); BUFFER is comprised of the Council's risk policy (P* and sigma); DISTRIBUTION is the estimated long-term average portion of the stock biomass in the U.S.

For the SDC portion of the proposed ROA, the Council may specify values in the place of "X" when adopting an ROA. The Council may also specify values "y" and "z," static values to bound the formulaic calculation. Options a and b are not mutually exclusive. The Council may also include either or both Options a and b, where MSST is defined in terms of age 1+ biomass via static value until such time that spawning stock biomass (SSB) can be calculated and X%SSB_0 is available based on an accepted stock assessment consistent with the BSIA and regulatory process, or by other framework the SSC and Council determine is appropriate.

Action 3: Harvest Control Rules for Pacific Sardine

No Action – *No HCR from the CPS FMP would be specified to be applied to the U.S. Pacific sardine stock.*

Alternative 1 – *A harvest control rules would be specified in the CPS FMP to be applied to the U.S. Pacific sardine stock, within the CPS FMP framework. During the annual harvest specifications process (upcoming cycle scheduled for April 2027) the Council may set harvest specifications based on those outlined in 2 in order to prevent overfishing and achieve optimum yield (OY).*

Table 2. HCRs that may be applied to the U.S. Pacific sardine stock under Action 3, Alternative 1.

FMP Element	Specification
Management Strategy	More intensive
ACL	Less than or equal to the ABC
HG	H = (BIOMASS – CUTOFF) * FRACTION * DISTRIBUTION (not to exceed MAXCAT or ACL)
CUTOFF	150,000 mt
FRACTION	Equal to E_{MSY}
DISTRIBUTION	1
MAXCAT	200,000 mt

Note, the parameters within the HG control rule are also included in this Alternative. DISTRIBUTION and E_{MSY} are as defined above. CUTOFF is the lowest level of estimated biomass at which directed harvest is allowed; FRACTION is the fraction of the biomass above CUTOFF that can be taken by the fishery; and MAXCAT is the maximum allowable catch by the directed fishery.

The Council adopted an iFPA for the stock definitions portion of this action in April 2026. That stock definition is included as Action 1 of the proposed amendment and is not before the Council for additional action at this meeting. The September 2026 Council action is to consider the ROA and, if possible, a PPA for the remaining management provisions under Actions 2 and 3.

The proposed revision to the stock definition and associated management provisions may require revisions to several sections of the CPS FMP, as identified in Attachment 4. Attachment 5 provides an overview of the anticipated timeline for this action in relation to the annual CPS management cycle, including stock assessments, fishing seasons, and harvest specifications. Agenda Item J.1.a, NMFS Report 1, provides additional information regarding the Pacific sardine stock assessment timeline.

Council Tasks:

1. **Adopt a Range of Alternatives for Actions 2 and 3 of the Pacific Sardine FMP Amendment.**
2. **Adopt a Preliminary Preferred Alternative for Actions 2 and 3, as appropriate.**

Reference Materials:

1. Agenda Item J.1, Attachment 1: Review of Management Provisions for Pacific Sardine.
2. Agenda Item J.1, Attachment 2: Joint Report of the SSC-CPSSC, CPSMT, and CPSAS on the Review of Management Provisions for Pacific Sardine.
3. Agenda Item J.1, Attachment 3: Proposed Amendment to the Coastal Pelagic Species Fishery Management Plan to Revise the Pacific Sardine Stock Definition.
4. Agenda Item J.1, Attachment 4: CPS FMP, Excerpts Highlighted for Revision Under FMP Amendment.
5. Agenda Item J.1, Attachment 5: Timeline of Stock Revision Action in Relation to Annual CPS Management Activities.

6. Agenda Item J.1.a, NMFS Report 1: Pacific Sardine Assessments: Timeline Updates.
7. If received, Public Comments are electronic only (see e-portal).

Agenda Order:

J.1 Fishery Management Plan Amendment: Management Provisions For the Revised Sardine Stock — Katrina Bernaus

a. Reports and Comments of Management Entities and Advisory Bodies
b. Public Comment
c. **Council Action:** Adopt Range of Alternatives and a Preliminary Preferred Alternative, if possible

PFMC
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