

MAGNUSON-STEVENS ACT ANALYSIS AND FISHERY MANAGEMENT PLAN
CONSIDERATIONS FOR THE PACIFIC SARDINE REBUILDING PLAN

Magnuson-Stevens Act Analysis

Below are the 10 National Standards as contained in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and a brief discussion of how each alternative is consistent with the National Standards, where applicable. In recommending a preferred alternative, the Council must consider how to balance the National Standards.

National Standard 1 — Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the United States fishing industry.

Each alternative in the range of alternatives selects the existing harvest control rules (HCRs) for the overfishing limit (OFL) and acceptable biological catch (ABC) and management measures for the northern subpopulation of Pacific sardine (Pacific sardine) as the rebuilding plan. The HCRs have been determined to prevent overfishing by the Council’s Scientific and Statistical Committee (SSC), and the fishery is managed so that catch does not approach the OFL. Additionally, the existing HCRs and management measures for Pacific sardine include measures intended to help rebuild the Pacific sardine stock, while also allowing access to limited amounts of Pacific sardine and the ability to access other profitable fish stocks that interact with Pacific sardine. Alternative 1, which, for this analysis, assumed full annual catch limits (ACL) removals, was determined by the district court to have failed to set ACLs that prevent overfishing. The remainder of the alternatives would prevent overfishing based upon the Rebuilder analysis.

OY is defined “as the amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems.” The HCRs for Pacific sardine take into account the protection of the marine ecosystem. However, compared to Alternatives 1, 5, and 6, Alternatives 2, 3, and 4 would result in reduced net benefit to the Nation as they would restrict potential recreational fishing opportunities through possible limitations to the live bait fishery and supply of seafood to the Nation through limitations on incidental landing limits for other coastal pelagic species (CPS) and non-CPS stocks. Alternatives 5 and 6 would allow for current harvest levels with room for flexibility as opportunities for recreational fishing, incidental encounters or markets dictate.

For overfished stocks, the Magnuson-Stevens Act’s National Standard 1 guidelines (see 50 CFR §600.310(j)(3)) provide direction on determining certain rebuilding reference points in order to specify T_{target} , including a target rebuilt biomass level, T_{min} (i.e., the minimum time to rebuild the stock assuming zero fishing mortality), and T_{max} (i.e., the maximum allowable time to rebuild the stock). Rebuilding reference points are outlined in [Section 1.4.1 of Agenda Item J.2, Attachment 1](#). A discussion of rebuilding timelines under management alternatives in the context of these reference points is included in [Section 3.2.2 of Agenda Item J.2, Attachment 1](#).

National Standard 2 — Conservation and management measures shall be based upon the best scientific information available.

The best scientific information available was used in the development of the range of alternatives. The range is based upon a holistic analysis of the Rebuilder modeling results, the basic biology and life history of Pacific sardine, and the history of the Pacific sardine fishery on the U.S. West Coast. Each of the alternatives includes setting Pacific sardine harvest specifications via the Council's annual harvest specifications process, in line with the requirements contained in the Fishery Management Plan (FMP) for when the biomass is below certain thresholds (i.e., 50,000 metric tons (mt) and 150,000 mt). Additionally, the information and data used to inform annual harvest specifications and management measures for Pacific sardine, which will now be set under the terms of the rebuilding plan, include the results of NOAA's acoustic-trawl surveys, which span much of the U.S. West Coast Exclusive Economic Zone (EEZ), from Mexico to Canada. The resulting annual stock assessment is reviewed by the Council's Scientific and Statistical Committee (SSC) and/or a panel of independent experts known as a stock assessment review panel. Other indices of abundance are sometimes incorporated into the stock assessment. For example, cooperative research using aerial surveys has been incorporated into stock assessments and resulting biomass estimates in the past, subject to a determination by the SSC to ensure consistency with National Standard 2.

National Standard 3 — To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

This action is related to an existing management unit stock in the CPS FMP, Pacific sardine, and is not changing how that stock is managed according to its range or relationship to other stocks. The northern subpopulation of Pacific sardine is the stock under U.S. management and is managed as a unit throughout its range within U.S. waters. The stock is seasonally present off Baja, Mexico, and during times of abundance can be found as far north as Vancouver Island, Canada, and Southeast Alaska. The HCR includes a DISTRIBUTION term estimating the average long-term distribution between U.S. and Mexican waters. Under Alternatives 1 and 2, the stock would continue to be assessed throughout its entire range and would be managed based on U.S. distribution. As Alternatives 3 through 6 would ensure set ACLs are equal to or less than the ABC, they comply with the DISTRIBUTION term in the HCR and are therefore consistent with National Standard 3.

National Standard 4 — Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be: (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

No alternative in the range of alternatives would discriminate between residents of different states. Under the routine sardine specifications process, the Council determines allocations to user groups for opportunity, such as the allowance for live bait fisheries (subject to the CPS FMP), and would continue to do so under any of the alternatives (excluding Alternative 2 in which no harvest would be permitted).

National Standard 5 — Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

Measures should allow for efficient utilization of the Pacific sardine resource while still allowing the stock to rebuild. Alternative 1 selects the existing HCRs and management measures for Pacific sardine in the CPS FMP for when the stock is at low biomass levels as the rebuilding plan; thus, Alternative 1 would allow the Council to manage the remaining sectors of the Pacific sardine fishery with minimal administration or enforcement change and no additional costs. Alternative 2 would unnecessarily disallow any utilization of fishery resources, and Alternatives 3 and 4 would restrict access to Pacific sardine in such a way that could result in both inefficient fishery operations for Pacific sardine, but also prevent other fisheries from achieving their OY as those fisheries would be restricted from harvesting their target stock because of Pacific sardine bycatch restrictions. Alternatives 5 and 6 would allow for flexibility to efficiently manage the remaining sectors of the Pacific sardine fishery as harvest levels and stock biomass fluctuate annually.

National Standard 6 — Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

Although Alternative 1 adopts a specific management framework for setting harvest levels each year, it also allows the Council to adapt these annual harvest specifications and management measures, if necessary, based on the best scientific information available on the resource and the associated fisheries. Alternatives 2 through 6 would pre-determine future ACLs and thereby limit the Council's ability to react to any variations among, and contingencies in fisheries and fishery resources. However, because Pacific sardine management and science is reviewed annually, and these alternatives would not change that, there is still inherently an ability of the management to account for certain variations and contingencies.

National Standard 7 — Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

Alternative 1 uses the existing management measures for Pacific sardine as the rebuilding plan. This strategy avoids duplication efforts in minimizing fishing mortality on Pacific sardine, as the CPS FMP already provides mechanisms to reduce harvest concurrently with a decrease in biomass. In some ways, Alternatives 2 through 6 negate the existing management efforts and annual science efforts that will continue regardless of which alternative is chosen by imposing pre-determined ACLs.

National Standard 8 — Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of National Standard 2, in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

As discussed in Agenda Item J.2, Attachment 1, the CPS fishing industry has already been suffering adverse socioeconomic impacts since the closure of the primary directed fishery in 2015 and the subsequent reductions in incidental allowances. Both of these measures were mandated by

the CPS FMP in response to decreasing Pacific sardine biomass. Using the fishery's current state as a baseline comparison for selecting a rebuilding plan, Alternatives 1, 5 and 6 would likely adequately provide for sustained participation for the smaller sectors of the fishery, thus minimizing additional and unnecessary adverse economic impacts. Alternatives 2, 3 and 4 would impose additional and unnecessary socioeconomic impacts.

National Standard 9 — Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

Alternatives considered in Agenda Item J.2, Attachment 1 do not impact the CPS FMP's treatment of bycatch in the Pacific sardine fishery.

National Standard 10 — Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

Alternatives considered in Agenda Item J.2, Attachment 1 do not impact safety at sea in the Pacific sardine fishery.

Section 303(a)(9) Fishery Impact Statement

Section 303(a)(9) of the Magnuson-Stevens Act requires that a fishery impact statement be prepared for each FMP amendment. A fishery impact statement is required to assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for (a) participants in the fisheries and fishing communities affected by the plan amendment; (b) participants in the fisheries conducted in adjacent areas under the authority of another Council; and (c) the safety of human life at sea, including whether and to what extent such measures may affect the safety of participants in the fishery.

The preliminary EA (Agenda Item J.2, Attachment 1) prepared for this plan amendment constitutes the fishery impact statement. The likely effects of the proposed action are analyzed and described throughout the EA. The effects of the proposed action on safety of human life at sea are discussed above under National Standard 10.1. Based on the information reported in this section, there is no need to update the Fishery Impact Statement included in the FMP.

The proposed action affects the Pacific Coast sardine fishery in the EEZ off the U.S. West Coast, which is under the jurisdiction of the Pacific Fishery Management Council. Impacts on participants in fisheries conducted in adjacent areas under the jurisdiction of other Councils are not anticipated as a result of this action.