

COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON PACIFIC SARDINE
REBUILDING PLAN FISHERY MANAGEMENT PLAN AMENDMENT – FINAL

The Coastal Pelagic Species Advisory Subpanel (CPSAS) supports the proposed fishery management plan (FMP) amendment language as described in [Agenda Item J.2, Supplemental REVISED Attachment 2](#). However, the CPSAS could not reach consensus on a final preferred alternative (FPA). Recommendations and rationale from the industry representatives and the conservation representative are provided below.

Industry Recommendation

The industry representatives on CPSAS recommend the adoption of Alternative 6 as the FPA for the rebuilding plan for the northern subpopulation of Pacific sardine (“sardine”). Alternative 6 maintains allowable catches at a minimal threshold amount (2,200 mt annual catch limit, ACL) when the stock biomass is low (below 50,000 mt) and allows ACLs to increase as sardine rebuild above that threshold. The 2,200 mt constant catch ACL is barely sufficient to support several important fisheries including live-bait, minor directed, and other CPS and Pacific whiting fisheries that incidentally catch sardine. However, this constant catch ACL is not without risk for restriction for these sectors. Since the rebuilding plan was implemented, the fisheries have exceeded 2,200 mt in landings in two years suggesting that there is a potential for this ACL to be constraining in the future. The increasing catch limits for biomass levels above the 50,000 mt threshold are intended to allow additional incidental catches during rebuilding as the stock grows and the potential for interactions rises. Alternative 6 best accounts for incidental catches by allowing sufficient catches at low biomass levels as well as allowing incidental catches to increase appropriately as stock biomass increases and interactions naturally increase. The CPSAS believes that Alternative 6 is a reasonable compromise under which ACLs are set to support rebuilding and the minimal allowable catches necessary to sustain fishery participants do not sacrifice conservation. Furthermore, allowable catches under Alternative 6 will always be subject to reduction as needed to maintain catches below acceptable biological catch (ABC) (as generated through an E_{msy} supported by best available science, which is set prior to implementation during annual specifications). Maintaining this contingency within the implemented alternative further ensures that rebuilding will not be unduly compromised by catches.

With regards to other alternatives, the CPSAS has concerns about any alternative that would require specific allocations between sectors. Specifically, the 5 percent ACL set by Alternative 3 at low biomass levels would severely constrain live bait, which depends almost entirely on sardine catches, and the fisheries that incidentally catch sardine. Landings values presented in the errata ([Agenda Item J.2 Supplemental Attachment 4](#)) in the last five fishing years would have exceeded the proposed ACLs that would have been set under Alternative 3 if it had been in place. Restrictions could lead to the shortening of fishing seasons, which would have negative economic impacts for both the live bait sector and the recreational fisheries that rely on it, including the wider regional tourism and recreational economy. For those fisheries that incidentally catch sardines, attaining

the ACL before the end of the fishing season could lead to infeasible discard requirements. The CPSAS discussed Alternative 5, including the proposed modification by the CPS Management Team to 2,800 mt, and while this would allow higher ACLs at lower biomass levels, it would restrict catches at higher biomass levels that are permitted under Alternative 6.

In terms of time to rebuild, Alternative 6 is a hybrid alternative that pieces together two alternatives run with the Rebuilder model (Alternatives 3 and 4). The Rebuilder model results show that these alternatives follow very similar rebuilding trajectories and timelines (rebuilding within one year of each other). Joining two segments of these alternatives into a single, hybrid alternative should provide a very similar trajectory and timeline for stock rebuilding as either of the modeled alternatives would independently. Alternative 6 would therefore support rebuilding by T_{\max} .

In addition, the rebuilder modeling set two overly conservative parameters concerning catches:

- 1) The modeling assumes far larger U.S. catches of Pacific sardine from the managed northern subpopulation than occurs, given the majority of U.S. catch is not from that stock, according to the 2024 Stock Assessment.
- 2) The modeling inputs that 9.9 percent of the northern subpopulation biomass is removed annually by the Mexico fishery, when currently none (or almost none) of their catch is from the northern subpopulation.

These parameters should provide additional confidence that a modeled recovery trajectory and timeline of the hybrid alternative is very similar to the trajectories of the modeled alternatives (3 and 4). The CPSAS recommends the Council consider these factors, as well as the average proportion of landings attributed to the northern subpopulation of sardine when selecting a T_{target} for their FPA.

In summary, Alternative 6 would provide economic benefits to the fishing communities with an acceptable projected time to rebuild.

Conservation Recommendation

The conservation representative of the CPSAS has concerns that in the absence of a methodology specified in the Rebuilding plan for setting E_{msy} , the Rebuilding plan will fail to demonstrate that it prevents overfishing or sets overfishing limits (OFLs) based on best scientific information available. The representative recommends the Council direct the National Marine Fisheries Service (NMFS) to specify the method for setting E_{msy} in the Rebuilding plan. Furthermore, the absence of Rebuilder analysis of Alternatives 5 and 6 prevents an informed decision on the rebuilding times under these alternatives and prevents a comparison with the other alternatives that were run in the model. The Council should direct NMFS to analyze all the alternatives using the Rebuilder model.

The conservation representative supports Alternative 3 as the FPA because it has been modeled to allow timely rebuilding, allows for increases in harvest as the stock increases, and lowers harvest as the stock declines. This alternative accounts for the needs of fishing communities, including live bait fishing and incidental catch in other fisheries, because it accommodates recent levels of

landings when the stock is at current levels, increases catch limits if the stock increases, and allows the highest possible catch limit that ensures rebuilding while stock declines.

The conservation representative is concerned that Alternatives 4, 5, and 6, and the CPSMT's recommendation to use a fixed ACL, means the exploitation rate would increase as the stock declines below 50,000 mt, running counter to the requirement to rebuild an overfished sardine stock. In the absence of the rebuilding plan specifying a method for setting Emsy (and thus OFL and ABC), it is not clear what the catch will be under these fixed ACL approaches when the stock is at low levels, or how those alternatives would prevent overfishing. Notably, the Rebuilder model used in the Rebuilding Plan did not analyze any other starting spawning biomass points below 25,879 mt.

PFMC

11/17/24