## COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVES APPENDIX AND NEW INITIATIVE

The Coastal Pelagic Species Advisory Subpanel (CPSAS) participated in the Ecosystem Workgroup (EWG) and Coastal Pelagic Species Management Team (CPSMT) meetings. We recommend the Council adopt the revised Appendix and identify new initiatives to scope for review in March 2023. We support the EWG's recommendation that the Council choose Initiative 2.1, Ecosystem and Climate Information for Species, Fisheries, and Fishery Management Plans (FMP); and that after this initiative is successfully underway, the Council consider tasking the EWG with more fully evaluating how to add in components of Initiatives 2.6 and 2.8.

We have the following recommendations for scoping 2.1:

- 1. The Council may wish to consider CPS species as the pilots for bringing ecosystem and climate information into management decisions; as part of the prey base for larger predatory fish as well as seabirds and marine mammals, we recommend CPS species dynamics be accounted for and included ecosystem information for these larger fish. CPS forage fish are short-lived and respond relatively quickly to climate-driven environmental change which in turn may affect predator species.
- 2. New information generated about CPS in the service of developing ecosystem information for other species might help fulfill research and data needs identified for CPS (e.g., Kuriyama et al. 2022). The assessment of northern anchovy, short lived and ranging nearshore to far offshore, is challenged with uncertainties. There are also outstanding issues that make the sardine stock assessment a complex and challenging task, surrounded with a high level of uncertainty. This can make the selection of harvest specifications and management measures difficult. We recommend solidifying that linkage of causal effect through ecosystem research that leads to a better understanding of environmental drivers.
- 3. We recommend highlighting existing built-in opportunities for integrating climate information into management. For example, the new central subpopulation of northern anchovy management framework outlined in Council Operating Procedure 9 allows the Council to consider any relevant factors when setting annual catch limits, including ecosystem indicators and trends in survey indices. This provides a direct way to operationalize the FMP-specific indicator reports the EWG proposes for this initiative.
- 4. Finally, as noted our March 2022 report, it is vital to integrate into these initiatives fishers' knowledge to identify areas of risk and flexibility to better preserve the well-being of socio-economic as well as ecological metrics which will help promote the goals of Councilmanaged fisheries. We recommend the March 2023 report be as specific as possible with the mechanism to do this, and we offer our help in these recommendations.

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