

COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON
FISHERY ECOSYSTEM PLAN (FEP) FIVE-YEAR REVIEW

In a joint webinar on August 29, the Coastal Pelagic Species Advisory Subpanel (CPSAS) and the Coastal Pelagic Species Management Team (CPSMT) heard a presentation by Yvonne DeReynier on the Ecosystem Workgroup (EWG) Report on the Fishery Ecosystem Plan (FEP) update (Agenda Item E.1.a, EWG Report 1). The CPSAS commends the EWG for their time and thought invested to update the FEP following Council directions. We agree that the structural changes proposed by the EWG in Chapters 1 and 2 make sense.

We appreciate the EWG's evolution of thought in drafting revisions to FEP visionary language, and we concur that Alternative D best captures the vision statement that encompasses our view of the FEP for the California Current. We appreciate that the vision statement recognizes the need for adaptive management and cannot be achieved without continued commitment to scientific research, which will require sufficient resources to achieve adaptive management in a timely fashion. We recommend that the Council approve Alternative D as the vision statement in the updated FEP.

The CPSAS also supports the July 2019 version Alternative Goals and Objectives as described, with the following clarifying recommendations:

Goal 2 aptly considers the CCE's long-term historical fluctuations in species composition and the dynamics of predator-prey relationships in assessing harvest guidelines for fisheries.

- Objective 2b calls for mapping ecological interactions to understand ecosystem effects of fishing, but this objective should also explicitly include a top-down analysis of predator-prey interactions over time to assess predator impacts to the forage assemblage. Food habit studies are now available to assist with this assessment, but it is important to recognize that food habit studies taken in one area may not accurately describe food habits in another. The expected wide variation in food habits is a problem both in the determination of the relative importance of sardine or anchovy to a predator and in evaluation of ecosystem function. Prey switching appears to be much easier for the predators than for modelers and fishermen.

To date no one has provided a time series of the combined biomass of the species that dominate the food habits of predators on small pelagic "forage" fishes. It is also important to recognize that sardine and anchovy are not the only key forage species. The key forage species in the California Current include: sardine, anchovy, herring, saury, osmerid smelts, antherinid smelts, short-belly rockfish, market squid, other pelagic squid (including those listed in the CEBA1 Initiative), the young of two medium-sized pelagic species (Pacific mackerel and jack mackerel), pelagic juveniles of a wide range of benthic fishes, and also juvenile hake. True ecosystem-based management should consider the entire ecosystem, including the entire forage assemblage (most of which is not fished).

In light of the increased nutritional value of certain forage species over others, an analysis of combined forage biomass/availability over time and in varying ocean conditions would be useful in management if it can capture the relative importance of these forage species, particularly in the context of the proportion eaten by dependent predators vs. the percentage harvested by fisheries.

- Objective 2d proposes to assess variability in fisheries income and vessel participation to determine whether CCE fishing rates have affected the stability of fishing communities. More directly, this objective should investigate the impact of increasingly precautionary management on west coast fisheries. This assessment also is called for in Objective 3b, which recommends assessing whether Council management programs support the ‘ecosystem services’ essential for fishermen to engage in fisheries.
- Objective 2e, proposing to characterize the cultural, social, and economic benefits that fish generate through their interactions in the ecosystem should also illuminate the documented tourist benefit attained through the presence of working harbors.

Overall, the CPSAS agrees that the July 2019 Alternative Goals and Objectives provide a balanced approach, addressing both conserving species and sustaining fisheries.

Further, we appreciate the EWG Report discussion of the phrase “outcome-oriented.” Given the current state of ecosystem models with their inability to predict or account for decadal-scale changes in oceanic circulation, among other factors, a majority of the CPSAS concur with the EWG’s decision not to recommend quantitative objectives. As the EWG Report stated: “At this point and without further expert support, [the EWG does] not have the “expertise to recommend feasible goals that can be quantitatively measured.” In the context of “ecosystem overfishing,” the EWG Report also acknowledged the CCE as “one of the ecosystems less likely to be subject to ecosystem overfishing than other marine ecosystems worldwide.”

The CPSAS also notes that if the Council wants to explore the development of measurable goals and objectives, they could follow either pathway identified in the EWG Report: a science-focused ecosystem initiative or a process similar to that employed by the Mid-Atlantic Fishery Management Council (MAFMC). The MAFMC Strategic Plan recognizes that many activities cannot be measured with traditional metrics, but still provides a mechanism for measuring the Council process toward achieving its goals and objectives. Such work could be scoped beginning in March 2020, given the current availability of relevant and useful information that would support this effort.

The CPSAS agrees with the statement in Section 1.2 Purpose of the Fishery Ecosystem Plan: “[T]he FEP is meant to be an informational document, and is not meant to be prescriptive relative to Council fisheries management.”

Thank you for your consideration of these comments and recommendations.

PFMC
9/13/2019