

ECOSYSTEM ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN FIVE-YEAR REVIEW

The Ecosystem Advisory Subpanel (EAS) appreciates the opportunity to comment on the Fishery Ecosystem Plan (FEP) Review. We think that the Ecosystem Workgroup (EWG) draft is overall a thoughtful update and does an excellent job laying out proposed edits and questions for the advisory bodies/management teams and the Council to consider.

Overarching comments and suggestions:

- Charts, graphs, tables, and narrative information and data should be updated throughout Chapters 3-5.
- We value the content of Chapter 3, however we are concerned about its length. To make the document more accessible to readers and increase reader understanding, consider shortening Chapter 3 by creating live web linkages to data sources and/or informational webpages. We think this would provide more opportunity to keep the information up-to-date, but note caution about “stale” web links.
- We encourage the use of document management tools, such as hotlinks or bookmarks linked to the table of contents, that facilitate easy navigation of the document.
- In sections that describe fisheries, efforts to highlight the social and economic connections among fisheries would be valuable. These relationships are diverse across geographies, habitats, seasonality, gear type, etc. Finding effective ways to depict how fisheries interact with each other is a critical element of understanding our fisheries at the ecosystem level. To encourage ecosystem thinking we recommend that visual aids such as diagrams that display the various dimensions of the connectivity among the ecosystem, ports, fisheries, fishing portfolios, etc., be included throughout the FEP.
- We appreciate the addition of the integrated ecosystem assessment diagram at the beginning of Chapter 3 and encourage similar diagrams throughout.
- We appreciate the inclusion of both state and federally managed fisheries and recommend that they be identified as such throughout Chapter 3.

Recommendations by section:

Chapter 3

- 3.2.2 Geologic Features of the CCE:
 - This section is missing methane seeps; it is an area where we have growing understanding of their distribution and prevalence on the seafloor, and their importance as EFH.
 - Lower trophic species: gelatinous zooplankton should include pyrosomes, given recent trends.
- 3.2.3 Habitat classification: This section is missing a description of oxygen minimum zones, which impact fisheries.

- 3.3.1.1 Phytoplankton and microalgal blooms: We recommend separate subsections for phytoplankton and harmful algal blooms because of their very different ecological roles and management implications.
- 3.3.1.2 Seagrasses: This section should be updated as more seagrass work is available in the scientific literature today.
- 3.3.1.3 Macro-algal (kelp) beds: Since 2013 we have seen a major loss of kelp on the West Coast. While centered in California, the issue is coast-wide stretching from Canada to Mexico, and well-documented in the scientific literature. The impacts on nearshore ecosystems are substantial and the connection to climate change is important to note.
- 3.4.2 Current Fisheries
 - We endorse the EWG’s proposed reorganization around pelagic and benthic species
 - Figure 3-7, as placed in the pelagic subsection, appears to contain some benthic fisheries (crab, flatfish) and this creates confusion. We support the concept of seasonally depicting pelagic and benthic fisheries in separate figures, and recommend a figure in the benthic section.
 - Describe and explain seasonality of fisheries
- 3.4.2.1 General characteristics of commercial fisheries: Clarify the last sentence in the middle paragraph, “*Pelagic longline vessels are also highly specialized, although participation is relatively low (because this gear type is prohibited in the West Coast EEZ and most vessels hail from Hawai’i).*” If longlines are a prohibited gear why are they used? Or do certain vessels from Hawaii have exemptions? Clarify and explain.
- 3.4.2.2 Descriptions of Major Commercial Fisheries in the CCE:
 - Specify the unit of measurement in Figure 3-8 (fathom, feet, or meters)
 - On page 37 indicate that vessels targeting pink shrimp are state-managed
 - The fishery descriptions talked about bycatch as an issue, however in the benthic trawl descriptions there is no language on habitat damage. This was surprising given recent Council action on groundfish EFH; we recommend adding it.
- 3.4.6 Fishing Communities: We support including tables on landings and revenue by port. We concur with the EWG draft that Puget Sound be given its own section. We do not think that Astoria requires its own section as it is not materially different from other coastal Oregon ports.
- 3.5.2 Ecosystem-Based Management Measures within FMPs: In the introductory paragraph, include language on Ecosystem Component Species designated across all four FMPs and note forage fish species designated as prohibited under CEBA-1. As an alternative, add a subsection at the end of 3.5.2 that provides this information.
- 3.5.4 Tribal and State Fisheries Management: In table 3-9, reorder the commercial fisheries according to the earlier pelagic then benthic fisheries order.

Chapters 4 and 5

The EAS provides the following advance comments for consideration in developing Chapters 4 and 5, and looks forward to reviewing a full draft for Chapters 4 and 5 from the EWG in the future.

- 4.3 Effects of Fisheries Management on Ecosystem Services and the Well-being of West Coast Communities: As stated, the approach to Fisheries and Fisheries Resources does not encompass the “continued ecosystem services for the well-being of West Coast communities.” Ecosystem services are much broader, although inclusive of fisheries and fisheries production, with various aspects that can be impacted by fisheries management. For example, management practices can impact ecosystem functions (e.g. nutrient cycling, secondary production), biodiversity, bioprospecting, and coastal tourism which are in addition to the provisioning services of fisheries production. A broader treatment of ecosystem services, beyond the fisheries themselves, is more in line with new draft Goal 3 as proposed.
- 5.3.1 Communities with a Dependency on Fishery Resources: The EAS notes that viable ports and infrastructure are necessary for communities to participate in fisheries. These needs extend beyond just those communities that are significantly dependent upon fishing. Thus, a critical analysis is the viability of ports, including how communities are sustaining infrastructure necessary for participation in fisheries. Analyses might include the number of ports with key components for participation (for example, fuel, icing, processing, and transportation) over time. We suggest that this section be retitled as “Sustaining Community Participation in Fisheries” with such analyses.

We thank the EWG for their work developing a draft Chapter 3 and outlines for Chapters 4 and 5, and look forward to continuing to improve the FEP in the future.

PFMC
09/10/20