ECOSYSTEM ADVISORY SUBPANEL REPORT ON THE CALIFORNIA CURRENT ECOSYSTEM STATUS REPORT

Members of the Ecosystem Advisory Subpanel (EAS) attended the Annual Ecosystem Status Report (ESR) webinar briefing on March 1, 2023, and would like to thank Drs. Chris Harvey, Andy Leising, and Greg Williams and the Integrated Ecosystem Assessment (IEA) Team for the report, presentation, and follow up discussion with the EAS at our meeting on March 5, 2023. The EAS sincerely appreciates the hard work of the IEA Team to compile, synthesize, and distill the very complex climate and ecosystem information into clearly articulated and readable segments with beautiful visuals presented in the annual ESR. The EAS found the month-by-month review provided clarity, and we especially appreciate the larger graphics and the detailed narrative throughout the report.

The EAS would like to highlight a few of the new analyses in this year's report. Specifically, the EAS appreciates the expansion of the offshore wind spatial analysis to assess suitability with fisheries and NMFS surveys for the Oregon Call Areas (Appendix Q); the new juvenile abundance indices of the Dover sole, thornyhead, and sablefish (DTS) trawl strategy (Appendix K), and the helpful description of the current West Coast forecasting tools' capabilities and limitations with respect to modeling interannual forecasts of climate impacts (Appendix E). Regarding the latter, this assessment is especially useful for understanding the current modeling capabilities to support the Fishery Ecosystem Plan (FEP) initiative 4 that the Council is embarking upon. While the IEA Team presented this assessment last fall to the Council's Scientific and Statistical Committee, the EAS believes it may be especially helpful for the Council to receive a similar briefing at the upcoming September meeting.

The EAS also appreciates and supports the request from the IEA Team to take a pass on the annual topic review session with the Science and Statistical Committee Ecosystem Subcommittee (SSCES) on proposed changes for the 2024 ESR that would occur in September 2023 (Agenda Item H.1.a, CCIEA Team Report 2, March 2023). As they noted, there is considerable work to be done to incorporate the improvements to the ESR that have already been discussed with the SSCES, and the EAS would appreciate their assistance in developing and executing FEP Initiative 4 in addition to their preparations for the 2024 ESR.

For the 2024 ESR specifically, the EAS believes it would be helpful to use Appendix E to inform Initiative 4, such as a table focused on the species selection criteria, as described in Agenda H.2.a, Ecosystem Workgroup (EWG) Report 1 (March 2023) (e.g., stock data availability, climate vulnerability, stock-specific community dependence/importance).

Looking ahead with ideas for future ESRs, the EAS identified a few areas of possible focus for the IEA Team's consideration (listed below, and not in priority order). These ideas are relative to data availability and analytical capability, should be viewed as aspirational, and represent the EAS' thoughts on what analyses could be useful to the Council process.

- Indicators for projecting, detecting, or confirming changes or shifts in species distribution, and how such changes could affect fishery diversification and fishing communities, including relative cost of fishing (e.g. fuel and shoreside support).
- Long-term climate change projections (e.g., 20-50 years) be included in Appendix E as a rotating report every few years.
- A rotating schedule for specific ESR sections, particularly those that may be more useful when updated with a few years of data, rather than annually, or could better serve the timing of Council fishery decision-making (e.g., groundfish-focused reports in even-numbered years).
- Short-term projections in the ecosystem charts (e.g., PDO) in the main body and/or rolled up charts with short-term projections in the appendix (Note: While inclusion of these projections would likely extend the length of the main body report, the EAS believes this would be a worthy use of additional pages).
- References to specific IEA webpages for indicators with descriptions of the frequency of updates (e.g., a summary table that cross-references the ESR figure with the webpage).
- Broader socio-economic impacts of offshore wind development to include shoreside and at-sea processors and shoreside businesses in fishing dependent communities, including consequences to recreational fisheries.
- Retrospective socio-economic analysis of events that have resulted in significant changes in fishing communities (e.g., closure of shoreside processing facilities, unavailability of ice, fuel, or cold storage).
- Using the Community Social Vulnerability Index (Figure 5.1 in the main body), identify the fishery participation networks (Figure 5.4 in the main body) for the most vulnerable communities.
- Provide an analysis on large baleen whales, particularly humpback, gray, and blue whales, similar to that of seabirds (Appendix M), as data allows.

In closing, the EAS again emphasizes its appreciation for the IEA Team and Drs. Harvey, Leising, and Williams for taking the time to patiently answer our questions and respond to our ideas. While the ESR on its own is an enormous undertaking for any group, the EAS recognizes that the specific individuals involved make all the difference, and all of us are fortunate to have this particular team supporting the Pacific Council's ecosystem process.

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