

ECOSYSTEM WORKGROUP REPORT ON THE ANNUAL STATE OF THE CALIFORNIA CURRENT ECOSYSTEM REPORT

Dr. Chris Harvey of the Northwest Fisheries Science Center and Dr. Toby Garfield of the Southwest Fishery Science Center presented the 2017 California Current Ecosystem Status Report to a joint meeting of the Ecosystem Workgroup (EWG) the Ecosystem Advisory Subpanel, and the Habitat Committee. We are grateful for the efforts that went into this year's report and particularly appreciate the careful attention the Science Centers paid to the many detailed comments that Council advisory bodies submitted during the ecosystem indicators initiative. The EWG especially appreciated the addition of Appendix C to the report, *Changes in this Year's Report, in Response to Council and Advisory Body Comments*, since it provides a transparent view of the progress and response by the IEA team.

Last year, we were uncertain whether the Centers would be able to address all of the advisory body comments on the ecosystem status report contents by 2017, and had suggested bringing new information over time via annual "focal topics" on new or additional report contents. The Centers have surpassed our expectations from the initiative on revising the ecosystem status report contents, which has revised our thinking on focal topics for ecosystem science in the Council process.

The EWG discussed whether the Council process should go forward with additional emphasis on annual engagement on the ecosystem status report, or to have more focused engagement with fishery management plan (FMP) advisory bodies on fisheries or fisheries-related ecosystem science. We recommend that the Council process facilitate more direct and ongoing engagement between the California Current Integrated Ecosystem Assessment (CCIEA) team and Council advisory bodies. For example, Section 7 of the 2017 ecosystem status report, *Research Recommendations*, discusses dynamic ocean management to reduce bycatch in highly migratory species (HMS) fisheries – Section 7.5. For 2017-2018, the CCIEA team could leverage its engagement with the HMS management team and advisory subpanel on dynamic ocean management to also discuss other ecosystem science in support of HMS management or improvements in indicators in the annual report pertinent to HMS species and fisheries. Other examples for FMP-focused discussions between the CCIEA team and management teams and advisory subpanels include the sablefish efforts under Agenda Item F.2. at this meeting and salmon "stoplight" Table 4.3.1 in this 2017 ecosystem status report.

The EWG would be happy to engage with the CCIEA team as described in section 7.2, *Continue Making Improvements to Indicator Analysis*, which calls for further refinements to existing annual report indicators, and identifying and prioritizing gaps in indicators. We are also interested in an idea that Center staff proffered during our discussions of this report: updating socio-economic analyses of fisheries management actions by analyzing the species landings portfolios by region or port that have varied with recent unusual physical and biological events (e.g. the Blob or harmful algal blooms). To promote fuller understanding of indicator analyses, other ideas that could be considered focal topics for inclusion in a future annual report include: 1) the role of risk and risk accounting in indicator analyses; or 2) high-level FMP-specific summaries that interpret what the suite of indicators in the annual report means for each FMP.

In summary, we recommend that the Council:

- Consider identifying an FMP for initial engagement with the CCIEA team, with the intent of improving conversations between ecosystem scientists and FMP-focused groups on bringing ecosystem science into fisheries management processes and using the *Research Recommendations* as a launching point for those discussions;
- Consider recommending a focal topic for near-future EWG work with the CCIEA team, potentially pulling from the examples in the text above or from the *Research Recommendations* in the ecosystem status report.

PFMC
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