

COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVE SCOPING

The Coastal Pelagic Species Advisory Subpanel (CPSAS) and Coastal Pelagic Species Management Team (CPSMT) participated in a joint webinar on September 3, 2015 to discuss the timeline and issues to be addressed in: 1) an initiative to Develop and Refine Indicators for Ecosystem Indicator Review, and 2) a Cross-FMP Climate Shift Initiative. CPSAS members reviewed the D.1 briefing book materials, including the National Oceanic and Atmospheric Administration Fisheries Climate Science Strategy and Ecosystem Workgroup (EWG) Report. The CPSAS commends the EWG for a comprehensive and thoughtful report, and we offer the following comments for Council consideration.

2.1 Coordinated Ecosystem Indicator Review Initiative Workload and Timeline

The timeline laid out in the report appears reasonable, although optimistic. It assumes that guidance for the March 2016 and 2017 California Current Large Marine Ecosystem (CCLME) Reports must be completed by September 2015 and 2016 respectively. We appreciate the EWG suggestion to record and archive proposed educational webinars for later viewing by those unable to attend at the scheduled time.

2.2 Fishery Ecosystem Plan Objectives

The CPSAS points out that while Fishery Ecosystem Plan Objectives are presented in the context of the California Current Integrated Ecosystem Assessment and CCLME Reports, advancing the state of knowledge of the CA Current System in light of climate change and ocean acidification is essential to better inform those reports. Thus the new Initiative 10 is directly tied to Initiative 8, Climate Shift Initiative, described in Section 3 of the EWG Report. Both initiatives should be regarded as high priority.

2.3 Fishery Management Plan Goals, Objectives, and Known Decision Points

Under Management, the EWG Report lists no activity for CPS in March. However, we suggest including potential in-season review of both Pacific mackerel and sardine during this time. Also, action on Methods Reviews, if needed, would be considered in March.

Regarding suggestions for inclusion in the annual CCES Report, (ninth bullet on page 9), the available forage base levels should encompass as much of the forage pool as possible, including unfished/unmanaged species.

On page 10, additional highest priority issues also discuss indicators of ecosystem status that could be useful in development of this initiative. We suggest including pteropod abundance as a high priority biological indicator because pteropods may be a predictor of salmon early ocean survival, they are among key ecosystem process indicators along with other zooplankton and forage fishes, and recent research indicates that pteropods are a measure of ocean acidification. These findings are documented in recent publications by Bednarsek, et al.

3.0 Cross-FMP Climate Shift Initiative

The EWG Report listed a number of Federal, state, and tribal groups now engaged in research on ocean acidification and climate change impacts. Another collaboration involving the shellfish industry, scientists, National Oceanic and Atmospheric Administration and state agencies on the west coast is the California Current Acidification Network (C-CAN). A key plank of C-CAN's mission is to coordinate and encourage development of an ocean acidification monitoring network for the west coast with focus on the nearshore. C-CAN products include Core Monitoring Principles and other reference manuals compiled by leading scientists in the field.

Standardized data collection is key to understanding regional impacts, and a coastwide network of nearshore monitoring stations in each region also is critically important to collect both biogeochemical and biological data in a systematic way to assess regional differences in ocean chemistry and related issues, such as low oxygen / hypoxic zones, which precipitate differing impacts on regional and even subregional ecosystems and fisheries. Partnerships with ocean-dependent fisheries will be beneficial to expand local knowledge.

The Council should take advantage of ongoing work, as the EWG Report recommends. We also suggest that the Council designate an ad hoc Climate Change-open access (OA) working group, including a subset of the EWG and also involving members of the other advisory bodies, including the CPSAS, to communicate and interact with the OA Hypoxia Panel and other relevant groups as part of this Initiative.

3.1 Climate Shift Initiative Workload and Timeline

The EWG Report acknowledged National Marine Fisheries Service's Draft Climate Science Strategy as a vehicle to address the Council's future questions about climate change impacts on fisheries and communities. The NOAA report provides a well-stated, strategic roadmap that is largely compatible with FEP Initiative A.2.8. EWG text revisions and additions further strengthen the Council's request to examine explicitly the effects of climate on fisheries-dependent communities. As noted above, we support the proposal to assemble an ad hoc advisory committee to review and report on scientific progress, and the concerns of fishing communities regarding long-term impacts of climate change.

In conclusion, we repeat a recommendation to the Council in March 2015 (Agenda Item E.3.d). Recognizing that additional funding will be needed for OA-climate change research, such funding should be allocated for the "climate" mission without taking it away from stock assessment surveys, which are essential to develop effective management measures.

PFMC
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