ECOSYSTEM ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVES: SCOPING AND SELECTION

Introduction

The Ecosystem Advisory Subpanel (EAS) reviewed and discussed the Ecosystem Work Group (EWG) Report 1 and written public comment on the potential fishery ecosystem plan initiatives to be next considered by the Council (Agenda Item I.2.a, Ad Hoc Ecosystem Workgroup Report 1). A majority of the EAS recommends prioritizing the Cross-Fishery Management Plan (FMP) Climate Shift Initiative.

Cross-FMP Climate Shift Initiative

The majority of the EAS thinks there is an urgent need to address the Cross-FMP Climate Shift Initiative due to the projected impacts of climate change on the California Current Ecosystem fishes and fisheries. In addition, there is already substantial ocean climate research occurring, and the Council should make its priorities clear to shape that research to help meet the Council's needs to further its Ecosystem management goals. Climate variability and climate change have the potential to affect fishery resources and communities. These projected impacts include shifts in species distributions, changes in abundance, and vital rates of fish and shellfish species in the marine ecosystem. Recent examples of oceanographic changes include the "Warm Blob," closures of crab and clam fisheries due to widespread harmful algal blooms, occurrence of large numbers of Humboldt squid off Central California, and changes in the distribution and migration of Pacific whiting. New research and policy efforts are underway by state, Federal, and tribal governments; universities; and non-governmental organizations. Some of these efforts include the West Coast Ocean Acidification and Hypoxia Science Panel, West Coast Governor's Agreement on Ocean Health, the Western Regional Action Plan on climate and fisheries science, and the National Marine Fisheries Service Climate Science Strategy. The Climate Shift Initiative should consider these existing efforts and then articulate a strategy for furthering the Council's ecosystem management goals.

The EAS recommends that the Cross-FMP Climate Shift Initiative addresses the ways in which fishing communities are impacted by climate change. There will likely be changes in species, landings, and revenues, but there may also be changes in areas fished, timing and paths of fish movements, and other factors. The Council will need to consider how its efforts to deal with climate variability and change can be structured so that they are the most beneficial to fishing communities.

Council actions to manage for sustainable fisheries with climate variability and change can occur through an adaptive management framework. Management actions taken with respect to climate will require evaluation and tuning as we learn more about how climate affects fisheries, communities, and the environment. Such action can be accommodated through existing Council procedures.

The EAS notes that ocean climate science is advancing quickly and this creates an urgency for the Council to articulate its needs to the climate science community so that the resulting science will be more relevant to fishery conservation and management actions. Both the EWG and public comment have suggested workshops as an approach to help the Council clarify what the research needs will be to incorporate ecosystem information into stock assessments. The EAS strongly endorses this approach.

The EAS reviewed the September 5, 2017, letter from Ocean Conservancy et al. and considers the suggestions in the letter to contain helpful illustrations for ways the climate shifts initiative could be translated into management actions. The merits of these suggestions should be reviewed in the initiative and workshops identified by the EWG.

The EAS took particular note of the presentation by Dan Holland, "The Dynamics of Adaptation to Climate-Driven Variability in California Current Fisheries and Fishing Communities." We endorse the objective of this research "to explore how more integrated management of fisheries can be used to increase resilience and human benefits derived from West Coast commercial fisheries." The EAS recognizes the value of such research to aid the Council and fishing communities to adapt and thrive.

Effects of Fisheries Management on Fishing Communities and Human Recruitment to the Fisheries Initiatives

A minority felt that the Council should consider first the combined initiative on the socio-economic effects of fisheries management practices on fishing communities (A.2.7) and on human recruitment to the fisheries (A.2.6). The minority was concerned that the climate initiative would result in increased uncertainty for fisheries management, and this uncertainty would trigger additional precautionary measures.

In contrast, the initiative to look at the combined effects of different fisheries management programs on West Coast fishing communities offered more substantive promise to improve ecosystem-based management of those fisheries. The minority felt that management programs might be modified to better support fishing communities and that this combined initiative could best provide tangible benefits to the coastal communities and fisheries. The minority felt that improving flexibility in regulatory actions is important to supporting the communities that depend on sport and commercial fisheries. Some regulations are still in place that are no longer needed under current management measures. The minority believes that removing regulatory inefficiencies and duplicative regulatory burdens on the fishing fleet is the simplest and most effective path to encourage human recruitment to the fisheries.

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