## COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON REVIEW OF FISHERY ECOSYSTEM PLAN INITIATIVES

The Coastal Pelagic Species Advisory Subpanel (CPSAS) participated in a webinar on March 3, 2017 to discuss the Ecosystem Workgroup (EWG) Report on the Review of Fishery Ecosystem Plan (FEP) Initiatives (Agenda Item F.3.a, EWG Report, March 2017).

The CPSAS commends the EWG for another comprehensive and thoughtful report. The EWG Report highlights two initiatives that they believe are ready for immediate consideration by the Council:

- A combined initiative on the socio-economic effects of fisheries management on fishing communities (A.2.7) and on human recruitment to the fisheries (A.2.6); and
- An initiative on the effects of near-term climate shift and long-term climate change on fish, fisheries, and fishing communities (A.2.8).

We concur that both initiatives identified by the EWG are very important and we offer the following comments for Council consideration.

A.2.6 Human Recruitment to the Fisheries and A.2.7 Cross-Fishery Management Plan (FMP) Socio-Economic Effects of Fisheries Management

The CPSAS notes the statement that Magnuson-Stevens Act National Standards 4 and 8 require, among other things, accounting for the importance of fishery resources to fishing communities and minimizing adverse economic impacts to those communities. We support the EWG's interest in analysis of Council-related socio-economic issues, including the demographics of existing fleets, their flexibility of movement between regions and fisheries, the long-term viability of fleets and how the Council can adopt licensing programs to ensure new entry. The fishery representatives on the CPSAS believe that such analyses will reveal an aging fleet faced with an ultra-precautionary regulatory framework and an array of formidable challenges, not the least of which is uncertainty regarding the long-term economic viability of existing fishermen and fishing communities. The current framework does not provide a bright outlook for the future. How this outlook can be changed for the better is a key question.

The CPSAS also supports the EWG recommendation to combine initiatives A.2.6 and A.2.7 to include investigation of how fisheries and fishing communities may be affected by Council management actions, including seasonality of operations and temporal-spatial landings compositions. The EWG also suggests investigating the history of fishery disaster declarations to facilitate consideration of how future fishery management decisions might mitigate against fishery disasters. As one example, the sardine fishery will be closed for the third straight year in 2017, due to an inadequate "least-worst" scientific assessment. As a result, California's historic "wetfish" industry is now facing the prospect of seeking a disaster declaration.

The CPSAS points out that the strongest incentive that provides motivation to enter or invest in a fishery remains the profitability. This is parameterized by the risk-to-reward factor. The fishery representatives on the CPSAS note that when fishery policy is based more on political, or politically correct, consideration as opposed to scientific premise, the risk factor quickly

outweighs the reward factor. However when surveys or stock assessments are inadequate to fully describe the geography a species occupies or to fully measure the population of a species, these risks rise dramatically. Simply put, if the goal truly is to recruit new entrants, which on most occasions requires their monetary investment, the first "out of the gate" question should be how can regulations and policy help provide opportunity for the participants to achieve a profitable bottom line? As stated in a number of the National Standards, net benefit, optimum yield, and basic economic considerations are center poles for setting policy and regulations, not afterthoughts.

## A.2.8 Cross-FMP Effects of Climate Shift

The EWG Report expresses interest in moving forward with this initiative, with a caveat recognizing the Council's limits on funding and authority. The Council's role in this initiative could be in part to facilitate discussion, particularly considering physical effects of a changing ocean environment on Council-managed species and resultant economic impacts on communities that depend on those resources, as well as broader ecosystem and resource concerns across FMPs.

The EWG Report notes that a number of Federal, state and Tribal groups are now engaged in research on ocean acidification (OA) and climate change impacts. One such collaboration involving the shellfish industry, scientists, NOAA and state agencies on the West Coast is the California Current Acidification Network (C-CAN) (http://c-can.info).

The Council should take advantage of ongoing work and continue to focus attention on this issue by considering emerging research and fostering discussion through the Council process. Standardized data collection is key to understanding regional impacts, and a coast-wide network of near-shore 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 sub-regional ecosystems and fisheries. Partnerships with ocean-dependent fisheries will be beneficial, perhaps essential in light of proposed funding cuts, to expand local knowledge.

We again suggest that the Council designate an ad hoc Climate Change-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 research community and other relevant groups as part of this Initiative.

In conclusion, we repeat a 2015 recommendation to the Council (March 2015 Agenda Item E.3.d, Supplemental CPSAS Report). 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 fishery management measures.

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