ECOSYSTEM ADVISORY SUBPANEL REPORT ON THE REVIEW OF FISHERY ECOSYSTEM PLAN INITIATIVES

The Ecosystem Advisory Subpanel (EAS) met on March 8, 2017, to discuss Agenda Item F.3, the Review of Fishery Ecosystem Plan (FEP) Initiatives. The EAS last reviewed and reported on the initiatives in two reports submitted to the Council for its March 2015 meeting. We also discussed the initiatives while convened for the Council's meeting in September 2015. This report affirms statements in the prior EAS reports and provides new observations and recommendations.

New Initiative for Addition to FEP Appendix A

The EAS reviewed a suggestion for an initiative to enhance consideration of ecosystem factors in the determination of optimum yield (OY) for fisheries. The EAS noted the strong foundation for such an initiative in the Magnuson-Stevens Act and regulations. Members also expressed concerns from fishing interests about how such an initiative might be implemented and its impact on fisheries. The EAS recommends that the Council add an OY initiative to the list of potential initiatives in Appendix A in order to invite discussion about ways to constructively address issues and opportunities with respect to the initiative. We encourage such discussions to include close consultation with fishing interests to ensure consideration of their socio-economic interests in the development of this initiative. As a starting point for discussion, we have attached a draft description of an OY Ecosystem Initiative at the end of this report.

Other Updates to Appendix A

The EAS supports the Ecosystem Workgroup's (EWG) proposed revised language for FEP Appendix A as presented in the EWG Report for this agenda item.

Advancing the Next Initiative

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

The EAS has supported the climate shifts initiative in prior reports because climate has the potential for substantial impacts on the ecosystem and fisheries. The climate shifts initiative would support management actions that maintain and promote resilience in fisheries; aid interpretation of trends, variability, and relationships among indicators; and capture predicted impacts and responses in species and processes. We discussed and agreed that the initiative in its current form is very broad. We would support efforts to consider ways to refine the scope of the initiative.

A.2.2 – Bio-Geographic Region Identification and Assessment Initiative.

The EAS continues to recommend prioritization and work on the biogeographic region initiative. Effective ecosystem-based management of fisheries requires management at the relevant scale. Progress on fisheries management models, biology, and the development and analyses of long-term data that address the scales the ecosystem operates on gives this initiative

increasing potential for improving fisheries management. We also note the applicability of this information to discern climate shifts and their impacts.

A.2.6 – Human Recruitment to the Fisheries Initiative. A.2.7 – Cross-FMP Socio-Economic Effects of Fisheries Management Initiative.

The EAS supports the EWG's recommendation to advance initiatives 2.6 and 2.7 in combination with one another. The two topics are not independent from one another. We recognize the need to strengthen applications of the social sciences to fisheries management, and we agree with the EWG's observation that these initiatives are ready for near-term consideration by the Council.

Draft Description of an Optimal Yield Ecosystem Initiative for Appendix A of the Fishery Ecosystem Plan

An objective of the Council's Fishery Ecosystem Plan (FEP) is to "Build toward fuller assessment of the greatest long-term benefits from the conservation and management of marine fisheries, of optimum yield, and of the tradeoffs needed to achieve those benefits while maintaining the integrity of the CCE [California Current Ecosystem]...^{"1} As described in National Standard 1 (NS1), OY must be assessed and specified in the Fishery Management Plans (FMPs) and Councils should determine what the relevant social, economic, and ecological factors are in determining optimum yield (OY). An OY Ecosystem Initiative would provide a mechanism to fulfill National Standard 1 by identifying and describing the social, economic, and ecological factors relevant to each FMP. As a matter of process, this initiative could be considered through a comprehensive ecosystem-based amendment, like done with Ecosystem Initiative 1, if appropriate. In the future, on a periodic basis as needed, FMP management and Integrated Ecosystem Assessment teams could assess relevant OY factors and update information related to those factors. Specifying these social, economic, and ecological factors in the FMP could more clearly and transparently inform future decision-making on matters such as annual catch limits and fishery conservation and management measures necessary to achieve OY on a continuing basis.

Rationale

The Magnuson-Stevens Act (MSA) mandates that fisheries be managed at OY, defined as the amount of fish which "will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems."² OY is prescribed as maximum sustainable yield (MSY) "as reduced by any relevant economic, social, or ecological factor."³ The MSA further establishes National Standard 1 (NS1), which states that OY shall be achieved "on a continuing basis."⁴

NS1 interprets OY as a decisional mechanism for resolving the MSA's conservation and management objectives, with the most important feature of OY being that it must prevent

¹ PFMC 2013. Pacific Coast Fishery Ecosystem Plan, at 4.

² 16 USC 1802 Sec. 3(33)(A).

³ 16 USC 1802 Sec. 3(33)(B).

⁴ 16 USC 1851 Sec. 301(a)(1).

overfishing. NS1 defines OY as a long-term average and states that FMPs must contain conservation and management measures to achieve OY on a continuing basis. An FMP "must contain an assessment and specification of OY" and Councils should consider the objectives of their FMPs and their management framework to "determine the relevant social, economic, and ecological factors used to determine OY." The assessment and specification of OY should be reviewed on a continuing basis so that it is responsive to changing circumstances in the fishery. NS1 guidelines include a list of potential considerations for social, economic, and ecological factors to take into account when reducing MSY to achieve OY.

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