ECOSYSTEM WORKGROUP REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVES

The Ecosystem Workgroup (EWG) discussed the Fisheries Ecosystem Plan (FEP) Appendix and proposed ecosystem initiatives during its August 26-30 meeting. We submitted the revised FEP Appendix as part of the advanced briefing book under <u>Agenda Item H.1.a, EWG Report 1</u>. In the introduction to that report, we provided details on revisions made to the FEP Appendix following the Pacific Fishery Management Council (Council's) March 2022 meeting. In this supplemental report, we discuss and make recommendations for the Council's next ecosystem initiative.

From the advisory body comments in March 2022, the initiatives more strongly favored by multiple advisory bodies were:

- 2.1, Ecosystem and Climate Information for Species, Fisheries, and Fishery Management Plans (FMPs);
- 2.2, Science Policy and Planning for Understanding the Effects of Oceanographic Conditions and Recruitment on Council-Managed Finfish Species;
- 2.6, Supporting Fishery and Fishing Community Resilience; and
- 2.8, Assess Flexibility in Fisheries Management Processes.

The EWG supports Initiative 2.2, but recognizes that the work described under 2.2 would involve scientific experts rather than a mix of science and policy professionals, at least in the initial stages. The work is fundamental to the Council's harvest policies, yet bringing it to bear in decision-making would come at later stages and could be done through the Council's standard stock assessment and methodology review processes. For these reasons, we recommend that the work described in draft Initiative 2.2 be forwarded to NOAA as requested future work under the Western Regional Action Plan (WRAP) on climate science (Agenda Item H.2). We elaborate on this recommendation in our supplemental report for that agenda item. At the same time, we recognize that staff and funding at the Science Centers for this type of work are limited and that a recommendation to move this work to the WRAP could still come at a cost to Science Center participation in whichever initiative the Council recommends next.

During our August 26-30, 2022, meeting, we discussed Initiatives 2.1, 2.6, and 2.8 at length, both individually and in the combined form proposed by the Ecosystem Advisory Subpanel (EAS) as Initiative 2.10. EWG priorities in recommending a particular ecosystem initiative are that the next initiative:

• Have clearly defined and doable goals and products that support future Council action on ecosystem-based management and climate change adaptation for fish stocks, fisheries, and fishing communities;

- Build on, without repeating, work completed under the Climate and Communities Initiative (CCI);
- Respect the past preferences and future schedules of other Council advisory bodies.

Based on those priorities, we recommend that the Council choose Initiative 2.1, Ecosystem and Climate Information for Species, Fisheries, and FMPs; and, that after this initiative is successfully underway, the Council consider tasking the EWG with more fully evaluating how to add in components of Initiatives 2.6 and 2.8. We read Initiative 2.10, Climate Informed Fisheries Management (which was proposed by the EAS), as a multi-stage initiative that prioritized beginning with the work described in Initiative 2.1, i.e. to "Develop climate and ecosystem indicators to inform fishery management decisions at the FMP level, which may be stock-specific" and then begin work on elements of Initiative 2.1, following up on the CCI, so that the Council may then decide whether to commit to the work described in Initiatives 2.6 and 2.8:

- October 2022 February 2023: EWG works with stock assessors, and management and technical team members to draft lists of species or stock groups that could serve as pilots for bringing ecosystem and climate information into management decisions, particularly taking into account harvest-setting schedules for FMPs.
- March 2023: Council recommends the first species or stock groups to be subject to targeted ecosystem and climate information in support of decision-making.
- September 2023: EWG reports to Council on progress to date on Ecosystem and Climate Information Initiative, and on background information in support of potential work on management strategies to improve fishing community resilience (Initiative 2.6) and management flexibility (Initiative 2.8). Council decides whether to ask its advisory bodies to engage in additional ecosystem initiative work on community resilience.
- March 2024: Council reviews work to date on Ecosystem and Climate Information Initiative, comparing information specific to species or stock groups to information available in 2024 ecosystem status report. Council decides whether to add more species or stock groups to those receiving ecosystem and climate information in support of decision-making, and makes recommendations on integrating species group information with new work targeting fishing community resilience.

The EWG also supports Initiatives 2.6 and 2.8. If the Council makes either of those initiatives its first choice, we recognize that they do not necessarily need to follow Initiative 2.1. However, we think that pursuing multiple of these already complex initiatives simultaneously would be intractable and challenging for the Council process.

Related Workload Considerations

In April 2022, the EWG reported to the Council on unfinished tasks from the CCI (<u>Agenda Item</u> <u>H.3.a, Supplemental EWG Report 1</u>). Proceeding now with Initiative 2.1, the Ecosystem and Climate Information Initiative, would allow the Council to address several of the incomplete CCI follow-up tasks, including:

- Catalog potential processes to incorporate climate variability and change data and information into our stock assessments, ecosystem assessments, scientific advice, and decision-making, including expected shifts in our stocks' abundance and distribution, and ecosystem conditions, over the next 5-20 years. (Initial discussion provided in Chapter 5 of the updated FEP adopted in March 2022.)
- Bring FMP-specific ecosystem reporting into the Council process at times when it is most needed and useful, supplementing the annual ecosystem status report and harvest decisions that are under development.
- All FMP-specific advisory subpanels and management teams could report to the Council on opportunities for and challenges to embedding climate variability and change into our assessments, decision tables, and scientific advice for fishery management unit species, with advice and input from the Scientific and Statistical Committee.

The EWG is concerned that useful and interesting ideas for future action elicited during CCI and recommended by the Climate and Communities Core Team may get lost in the review and consideration of new ecosystem initiatives. As we reported in April, many of the follow-up tasks from the CCI do not fit within an ecosystem initiative because, for example, the work more appropriately falls to the relevant FMP advisory bodies (i.e., not the EWG). Our supplemental report for Agenda Item C.8 at this meeting will update the list of unfinished CCI tasks, which will give the Council an opportunity to decide whether to add any of that work to its future agendas.

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