

ECOSYSTEM ADVISORY SUBPANEL REPORT ON FISHERY ECOSYSTEM PLAN INITIATIVE 4

The Ecosystem Advisory Subpanel (EAS) met on May 31st to discuss the Ecosystem Plan Initiative 4 update as discussed by the Ecosystem Workgroup (EWG) at their meeting on May 15 and 17, 2023. We appreciate the work of the EWG, stock assessment scientists, Integrated Ecosystem Assessment (IEA) Team, and Groundfish Management Team members who are participating in this effort. Our discussion and comments are with regard to the proposed risk tables, consideration of stoplight tables, selection of species, possible topics for workshops, and pathways forward.

Risk Tables

We appreciate the presentation by Dr. Stephani Zador, Alaska Fisheries Science Center, on the evolution of risk tables in the North Pacific and the discussion by the EWG relative to the purpose and composition of the proposed risk tables for Initiative 4. Notably, the original North Pacific risk table (see Agenda Item H.2.a, EWG Report 1, March 2023, p. 3) had included information on the stock assessment, population dynamics, and environmental considerations for the specific stock; this version evolved to add information on fishery performance (as a column to the right), which includes landings, market, and management considerations, and dropped the level for “Extreme Concern.”

Through the EWG’s discussion, they considered the following changes:

- Adding the “fishery performance” column and another column for social or economic value to dependent communities; and
- Adding a risk level indicative of the stock being better than “normal,” since normal is the highest level achievable in the North Pacific’s risk table.

The EAS recognizes that the risk tables serve multiple purposes, including: 1) providing an assessment of risk relative to stock sustainability when setting harvest limits; 2) documenting the consideration of environmental/ecosystem factors not directly incorporated into the assessment by the stock assessment team; 3) organizing and presenting relevant information to decision makers (i.e., the Council); and 4) communicating key stock-related information to fishery managers and stakeholders. As such, the EAS supports adding both of these columns to the proposed risk table to enhance Council decision-making and stakeholder communication. While we recognize much of this information may not yet be available for most species, we do see value in being able to consider it when it becomes available.

The EAS also recommends inclusion of a level for stock conditions that are above normal. Such information may be particularly useful if there is a strong correlation between an environmental driver and a stock’s status, vital rates (e.g., growth, survival, productivity, recruitment), or range and distribution, or inform whether stock status could be relative to anomalous ecosystem conditions. Such information could also inform the expected duration of current stock status.

Selection of Species

While the EWG appears to be moving forward with a plan to develop risk tables for petrale sole and sablefish for September, it is unclear whether or when risk tables for additional stocks, such

as sardine (or anchovy) or a Chinook salmon stock, will be forthcoming. In March, the EAS had expressed concerns about using a single species to demonstrate the use of risk tables (or other tools) for this important enterprise noting that a single species would be unlikely to demonstrate the breadth and likely further impact of incorporating risk assessment into various points of management processes for multiple fishery management plans (FMPs). We also noted that selecting stocks from multiple FMPs is more likely to accomplish the objective of Initiative 4, which is to develop and test clear pathways to use climate and ecosystem information to inform Council decision-making. The EWG had briefly discussed whether anchovy would be a better demonstration species than sardine, and indicated that a single Chinook salmon stock would likely be more informative than a generalized Chinook salmon risk table. The EAS does not have a preference on specific stock selection, but again notes that initially choosing stocks from multiple FMPs for drafting risk tables for Initiative 4 should provide more opportunity to choose those with divergent characteristics that will result in different risk tables, and thus better inform the breadth of the process.

Possible Workshop Topics

The EAS received a report from The Nature Conservancy in March on resources they had available to fund two workshops for this effort. The EAS agrees that these workshops could help advance the dialogue on understanding and managing for climate effects on Council-managed stocks and fisheries and appreciates the need to identify the location, venue, and scope of discussions for workshops this fall.

To that end, the EAS identified the following possible topics that we think could help the Council move Initiative 4 forward:

- Species selection criteria (e.g., how to identify stocks for the use of tools, such as spotlight tables or risk tables, which may be different for each FMP);
- Fishery performance (e.g., how to include fishery observations and on-the-water information into the risk tables);
- Data richness (e.g., how to assess and consider stocks that are data moderate or data poor); and
- Stock portfolio (e.g., how to identify species that are representative of larger groups of fish, such as those with similar spawning times, physiological constraints (pH, temperature) or susceptible to temporal climate effects, such as harmful algal blooms).

PFMC
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