ECOSYSTEM WORKGROUP REPORT ON RESEARCH AND DATA NEEDS

The Ecosystem Workgroup (EWG) discussed Research and Data Needs during its meeting on May 27, 2025, and reviewed Agenda Item D.3, Attachment 1. The EWG expresses its appreciation to the Scientific and Statistical Committee (SSC) for identifying preliminary Research and Data Needs recommendations, and to the Council for incorporating additional recommendations provided by Advisory Bodies at the Council's April 2025 meeting. Unfortunately, the EWG did not meet in April and we were unable to provide comments on the preliminary list of Research and Data Needs at that time. We offer the following suggested additions for consideration at this meeting as part of the final list of Research and Data Needs (the numbering below corresponds to the Science and Management Challenges as shown in Agenda Item D.3, Attachment 1).

1. Data Collection

- a. *Ecosystem Monitoring*. Append to the first bullet: "Develop a coastwide krill index." The EWG notes that CalCOFI and other West Coast cruises (e.g., Rockfish Recruitment and Ecosystem Assessment Survey) provide a data stream for krill and copepods that could be valuable for monitoring the entirety of our California Current Ecosystem (CCE) (Phillips et al. 2022). The need remains for better understanding and synthesis of the various datasets into a single coastwide krill index. Copepod abundance was recently linked with anchovy recruitment (Swalethorp et al. 2023), and krill and copepod data may be a valuable resource for making near-term forecasts of fishery availability.
- b. *Ecosystem Monitoring*. Add a new bullet: "Ensure that diet data is analyzed in a timely manner." Currently, highly migratory species and marine mammal diet information (collected via samples from commercial and recreational fishermen) is lagged behind by one or more years (e.g., Portner et al. 2025). Diet data collection and analysis for West Coast species has been poorly funded and supported for decades, yet is essential to understanding species interactions within and beyond the CCE.
- 2. <u>Stock Assessment Methodologies</u>. Add a new bullet: "Explore use of multispecies- and ecosystem-based assessment methods to expand opportunities for using single- and multispecies management reference points."
- 5. <u>Ecosystem Dynamics</u>. Add a new bullet: "Identify and evaluate environmental or biological data needed to help inform or validate dynamic ocean management tools for fisheries needs (e.g., HMS)."
- 6. <u>Harvest Policy</u>. Append to the first bullet or add a new bullet: "Better understand how changing environmental conditions affect performance of existing and potential alternative harvest control rules."

PFMC 06/13/25