## ECOSYSTEM ADVISORY SUBPANEL SUPPLEMENTAL REPORT ON RESEARCH AND DATA NEEDS

The Ecosystem Advisory Subpanel (EAS) reviewed the Scientific and Statistical Committee's (SSC) Research and Data Needs Preliminary Priorities report (<u>Agenda Item C.2</u>, <u>SSC Report 1</u>, April 2025). We thank the SSC for developing a more concise set of research and data needs as requested by the Council and we support its organizational structure. Our following suggested edits to the Research and Data Needs Priorities document echo our recommendations provided to the Council in March 2025 to further refine future iterations of the Annual California Current Ecosystem Status Report (<u>Agenda Item F.1.b</u>, <u>Supplemental EAS Report 1</u>).

## **Ecosystem Dynamics/Preliminary Research and Data Needs**

We suggest adding the following bullet:

• Leverage opportunities for real-time "on the water" observations through collaboration with the fishing community to quantify oceanographic conditions and ecosystem processes (e.g., thermoclines, bottom temperatures) to inform ecosystem variability with fisheries impacts.

This could provide powerful insight into the state of the ocean and may help explain episodic and difficult to predict/model events.

## **Data Collection/Ecosystem Monitoring**

The Research and Data Needs Preliminary Priorities includes ecosystem monitoring recommendations under the Data Collection challenge, including "Evaluate existing ecosystem monitoring programs and incorporation of new data streams." We support this and suggest that the incorporation of new data streams can also benefit other, non-ecosystem research.

In addition, we suggest Council expand this bullet to incorporate not only new data streams, but also new technology such as environmental DNA (eDNA) that represents an emerging, cost-effective opportunity to construct annual and long-term insights into fish community dynamics and the ability to detail regional forage availability to better understand food habits of dependent predators.

PFMC 04/11/2025