

RESEARCH AND DATA NEEDS

According to the Magnuson-Stevens Act, every five years the Pacific Fishery Management Council (Council) is scheduled to take up the issue of research and data needs. The purpose of this requirement is to provide a list of the Council's research needs in order to support the management of U.S. west coast fisheries. This list is important for the Council's partner agencies (e.g. Northwest and Southwest Fisheries Science Centers, state fish and wildlife agencies, the Pacific States Marine Fisheries Commission, and other public/private/academic entities) that may be in a position to help fill research and data gaps.

In recent years the Council's list of research and data needs has become extensive. The [Council's research and data needs database](#) includes over 350 research priorities that have been identified by the Council. This extensive list incorporates far more research topics than can be addressed with available resources by partner agencies, universities, non-profits, and members of the public. Recent discussions with leadership of various partner agencies have indicated a strong desire for the Council to prioritize, organize, and streamline the list of research topics that comprise the Council's research and data needs list. It is for this reason that Council staff are proposing a slight departure from the usual research and data needs identification process that is outlined in the Council Operating Procedures.

As outlined for this cycle in Attachment 2, there are three general tiers within a framework being proposed by staff. These include: 1. challenges, 2. associated topics, and 3. research and data needs. The decision-making process regarding the identification of Council research and data needs follows these three general tiers, and this meeting aligns with the first tier.

Should the Council wish to follow this framework, the Council should use this meeting to do two things. This includes:

- 1) identify the Council's top science and management challenges and
- 2) weigh in on key topics associated with those challenges.

In the context discussed here, the term "challenge" can be thought of as a high-level research need that stretches across more than one fishery management plan (FMP) and for which multiple topics can be identified. "Topics" are actual science and/or management examples within each challenge, within which various "research and data needs" could be identified and pursued for potential solutions. The purpose of having the Council identify these high-level challenges and to weigh in on associated topics at this early stage is that it effectively serves as the Council's statement regarding high level prioritization of areas where research is needed to advance Council objectives. In doing so, this statement provides the Scientific and Statistical Committee (SSC) and Council advisory groups some structure within which specific research and data gaps could be filled. The vision is that, when the Council's research and data needs process has concluded, there will be a relatively small set of challenges identified, within each challenge there are several associated topics identified, and within each topic are a list of specific projects or "research and data needs".

In the interest of clarifying this concept and advancing discussion, Council staff compiled an initial draft list of challenges below that stretch across various FMPs and for which the Council has collectively, at one time or another, expressed a desire for more research. This list is accompanied

with several topic areas that also flow from observations and discussions with the Council, SSC, and advisory bodies (Attachment 1).

Draft Challenges

1. Data limited stocks: The Council manages well over one hundred species along the U.S. west coast, many of which can be considered data limited for a variety of reasons. This presents management challenges in the form of stock status and setting of acceptable fishing levels.
2. Fishery impact projections: Many Council-managed fisheries rely upon the projection of fishery impacts associated with trip limits, bag limits, season, areas, and other factors. These require research and data to inform a number of assumptions utilized in estimation.
3. Socioeconomic resilience: The social and economic effects of Council actions extend beyond the measurement of economic impacts. The resilience of communities and fishing sectors to the effects of change is taking on increasing importance.
4. Intersection of ecosystem dynamics and fishery science/management: The effects of a more dynamic or changing ecosystem raise challenges for both fishery science and management to be responsive. Many of these challenges cross multiple FMPs.

Under this agenda item, the Council will consider reports from the SSC and advisory bodies regarding their perspectives of priority research and data need high-level challenges and associated key topics (e.g., analogous to Attachment 1 perspective).

The Council is scheduled to adopt top science and management challenges and weigh in on associated topics to guide the research and data needs prioritization process. The Council is encouraged to keep the list of high-level challenges to ten or less. In April 2025, the Council is scheduled to adopt a list of preliminary research and data needs selected to best address the top science and management challenges identified at this meeting. The preliminary list would be considered, refined and a final research and data needs list is scheduled to be adopted at the June 2025 Council meeting.

Council Action:

1. **Adopt top science and management challenges.**
2. **Provide input on key topics associated with each challenge.**

Reference Materials:

1. Agenda Item D.3, Attachment 1: Research and Data Needs: Perspectives on Top Management and Science Challenges.
2. Agenda Item D.3, Attachment 2: Framework for the PFMC Research and Data Needs (RDN) Five-Year-Update Cycle.
3. If received, Public Comments are electronic only ([see e-portal](#)).

Agenda Order:

- D.3 Research and Data Needs Marlene A. Bellman
a. Reports and Comments of Management Entities and Advisory Bodies

- b. Public Comment
- c. **Council Action:** Adopt Top Science and Management Challenges

PFMC
10/24/24