

**New England Fishery Management Council**

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John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director***MEMORANDUM**

**DATE:** January 2, 2018  
**TO:** Research Steering Committee  
**FROM:** Dr. Rachel Feeney, Staff Coordinator  
**SUBJECT:** **Research Priority Setting Process**

***BACKGROUND***

Per the Magnuson Stevens Reauthorization Act of 2006, Councils are required to develop five-year research priority plans and submit them to the Secretary of Commerce. In the past, Plan Development Teams have updated the list for priorities specific to their particular PDT. The lists have then been reviewed by advisory panels, committees, and the Scientific and Statistical Committee (SSC), resulting in a bulleted list, which is several pages long, and that is approved by the Council. The list is only sorted by topic.

When the Research Steering Committee (RSC) reviewed the draft research priorities and data needs for 2017-2021 in May 2017, the RSC viewed the list as a catalogue of broader research needs rather than a targeted and ranked list of research priorities. As a result, the RSC felt that the Council and research community could benefit from a more targeted list. On May 25, the SSC discussed the draft list, and SSC members concurred that prioritization of the list would be helpful with a rationale for each topic. In June, the NEFMC finalized approved the list “as-is,” without prioritization or additional details.

In July 2017, the RSC briefly discussed research prioritization again and asked staff to provide information about how other Councils set priorities to see what can be learned about process improvements. The information in this memo about other Councils has been obtained through their websites, and in most cases, through direct communication with staff members. In December 2017, the NEFMC technical staff was asked for input on process improvements, and that is also included here.

***PROCESSES OF OTHER COUNCILS******Mid-Atlantic Fishery Management Council (MAFMC)***

*Staff contact:* Rich Seagraves, Senior Scientist

*Document title:* *Comprehensive Five Year (2016-2020) Research Plan*

*Document location:* Posted on website: <http://www.mafmc.org/research-priorities/>

*Document content:* Four page introduction with overarching needs, followed by eight pages of bulleted lists of general and species-specific needs. In species-specific lists, color codes identify one “first priority” and two “first and second runners-up.”

*Process:* This first iteration of this list, in 2008, was not prioritized. The 2015 update was retooled, with general priorities stemming from public input during the MAFMC's Visioning Project and species-specific priorities generated from needs identified during stock assessments and by the SSC. For the species-specific priorities, Seagraves asked the lead MAFMC staff member and the lead NEFSC assessment scientist to identify one top priority and two others that are also very important. These three priorities were then color coded accordingly. Seagraves then brought the retooled list to the SSC and full Council for approval. The staff input was approved without a challenge. This process is not formalized into the MAFMC's operating procedures.

*Timeframe:* The process took 1-2 months, from retooling the list, getting staff input, and final Council approval.

*Feedback/next steps:* The NEFSC director praised the effort at the December 2015 Council meeting, but there has been little additional feedback since. A few years ago, the MAFMC used its own priority list when funding cooperative research. The MAFMC is developing an ecosystem risk assessment with the NEFSC, which has elevated needs. Seagraves suggested there be a NRCC discussion about better integrating NEFMC and MAFMC priorities into the NEFSC priorities.

#### *Gulf of Mexico Fishery Management Council (GMFMC)*

*Staff contact:* Dr. Carrie Simmons, Deputy Director

*Document title:* Updated List of Fishery Monitoring and Research Priorities for 2015-2019

*Document location:* Posted on website: <http://gulfcouncil.org/wp-content/uploads/GMFMC-Updated-List-of-Fishery-Research-and-Monitoring-Priorities-2015-2019.pdf>

*Document content:* List (nine pages) organized into four broad areas: "broad multi-purpose research, monitoring, and survey programs," "individual species or specific research," "economic and sociocultural," "and "ecosystem-based management." Within each broad area, every research item is ranked into three priority codes. The coding definitions are unique to each broad area.

*Process:* Updates to this list is timed to coincide with the five-year Council funding grant. For the most recent update, Simmons took the latest version and asked the SAFMC staff give input on updates. She then brought the updates to the SSC for input. The SSC wished for clearer separation of long-term monitoring needs from shorter-term research. The list was clarified and brought to the Council for approval. This process is not formalized into the GMFMC's operating procedures.

*Timeframe:* The process took 2-3 months, though Simmons suggested a longer timeframe may improve the process.

*Feedback/next steps:* It is unclear how NMFS uses the list; theoretically it helps shape the direction of cooperative research, MARFIN grants, and is used by the Regional Office, but there has been no feedback.

North Pacific Fishery Management Council (NPFMC)

*Staff contact:* Jim Armstrong, Plan Coordinator/Analyst

*Document title:* Research Priorities 2017-2021

*Document location:* Posted on website: <https://www.npfmc.org/research-priorities/>.

*Document content:* Document is a 13 page spreadsheet, and there is also a searchable database. The spreadsheet includes the research priority title, description, Council priority (critical ongoing monitoring, urgent, important (near term), strategic (future needs)), and research status (no action, pending, partially underway, underway). The database has fields with additional information (e.g., notes on status updates, plan team and SSC input, which plan the priority relates to). In terms of the Council priorities, “urgent” describes a discrete project that is critical to the successful management of the fishery. “Important (near term)” describes a need that is important, but the lack of data is not expected to constrain the ability to manage the fishery.

*Process:* The NPFMC produces an update to this list at its June meeting each year, with needs projected out for the following five years. Ideas for research needs can come from anywhere, but they generally originate through an annual webinar of each Plan Team held in May. Recommendations for research priority revisions are then considered by a subset of the SSC and Council in June.

A few years ago, Armstrong was asked to shepherd the research priority updates through the process. Developing the database stemmed from his efforts to make the process more efficient. In theory, Plan Teams would submit edits to priorities within the database, and the SSC would submit input, which would all be collated and provided to the Council for approval. In practice, prior to the plan team meetings, he uses the database to compile the list of needs pertinent to each plan team. He has found that the database is good for tracking the development of ideas and progress of addressing needs, but the spreadsheet has been helpful in communicating the priorities. He notes that it can be difficult to identify status updates of the research needs and the research findings. This process is not formalized into the NPFMC’s operating procedures.

*Timeframe:* The annual process takes 2-3 months. Database updates ongoing.

*Feedback/next steps:* In addition to submitting the list to the Secretary of Commerce annually, the NPFMC sends it to research institutions and funding programs. The next big project is to close the loop, to work better with the North Pacific Research Board and the NWFSC to identify common needs. It is currently unclear how NMFS uses the list; there has been little feedback. In June 2017, the NPFMC created a Social Science Plan Team, which will contribute to shaping the socioeconomic research needs.

Western Pacific Fishery Management Council (WPFMC)

*Staff contact:* Marlowe Sabater, Marine Ecosystem Scientist

*Document title:* Five-year Research Priorities under the MSRA, 2014-2019

*Document location:* Posted on website: <http://www.wpcouncil.org/fishery-plans-policies-reports/research-priorities/>.

*Document content:* Document is 12 pages. Within four themes (e.g., stocks, ecosystems, protected species, human communities), the needs are listed in order of priority. There are 2-3 sentences describing each need.

*Process:* The WPFMC finalized the initial set of priorities in 2009. The process included conducted an initial scoping of priorities to brain storm all possible research priorities under the four themes. The SSC then did a voting exercise (using sticky-dots, with each member having five votes) to rank the priorities. Council staff then weighed in before Council approval.

The initial priorities expired on September 2013. Council staff reviewed and updated the status of each item and engaged its Protected Species Advisory Committee, Fishery Data Collection and Research Committee – Technical Subcommittee, and Social Science Planning Committee to assess whether new research items should be added. In June 2014, the SSC endorsed the updated research priority document and the Council accepted the SSC’s endorsement. The Council transmitted the document to the Secretary and the Pacific Islands Fisheries Science Center in July 2014.

*Timeframe:* The process took 9 months.

*Feedback/next steps:* Annually, the priorities are vetted among advisory panels. Midway through the five-year period, PIFSC is asked to provide the WPFMC with an update on which priorities have been addressed. This informs future priority setting.

#### *Pacific Fishery Management Council (PFMC)*

*Staff contact:* Jim Seger

*Document title:* *Research and Data Needs, 2013*

*Document location:* Posted on website: <http://www.pcouncil.org/resources/research-and-data-needs/>.

*Document content:* Document is 82 pages. Within many of the topics, the list is ranked by “highest priority,” “ongoing priority,” and “emerging issues.” Many of the descriptions include background information.

*Process:* The process is described on the Council’s website and is included in the Council’s operating procedures. In April, staff presents an updated list to SSC and advisory panels. The Council approves a draft for public review in June and finalizes it in September.

*Timeframe:* 6 months.

#### *South Atlantic Fishery Management Council (SAFMC)*

*Document title:* *Research Needs in Council Fishery Management Plans*

*Document location:* Posted on website: <http://safmc.net/research-needs-in-council-fishery-management-plans/>.

*Document content:* The list is undated and posted directly on the website. It is organized by theme, and items are in no particular priority order. Some topics indicate that their list is lifted

from another document (e.g., a stock assessment), including a document from 1990 and another from 1996.

### Caribbean Fishery Management Council (CFMC)

A list of research priorities could not be found on the CFMC website. CFMC staff was contacted, but given that this region has been impacted by recent hurricanes, connecting with this Council's staff has not pursued further at this time.

### **NEFMC STAFF INPUT**

In December 2017, the NEFMC technical staff were asked for ideas for how research priority setting processes may improve. This input was reviewed by the Executive Director.

- The regions appear to vary greatly in terms of the amount of effort dedicated to creating and updating lists. The NPFMC seems to dedicate the most effort, having created an online database that is updated annually. However, no matter the degree of effort, a common theme is that there has been little feedback from NMFS about what happens with Council research priority documents once submitted, as well as how the priorities are getting addressed. The WPFMC specifically requested that NMFS provide feedback, which seemed helpful in subsequent priority setting. ***Better information about the end use of these priority lists will help determine the degree of effort that should be devoted to the task.*** To that end, the NEFMC Executive Director is writing a letter to NMFS to help clarify the end use of the research priority lists submitted by Councils.
- Research needs within the Northeast Region get articulated on an ongoing basis, through stock assessments, setting the Council's Research-Set-Aside (RSA) priorities, and in writing the "research needs" section of Environmental Impact Statements. It has been unclear how the five-year research priority setting process fits in. Not all research topics identified through the five-year process are articulated through other processes and vice-versa. Perhaps there should be a master list that is regularly updated and submitted to NMFS every five years, from which smaller lists could be generated, such as for a RSA or a FMP amendment document. Duplicative processes are discouraged.
- It would be helpful to have, for each research priority, a brief rationale articulated with it. Though it may take some time to develop the rationale, it would greatly improve communication and make sure that the list is focused on research questions. A rationale should include the end use/management purpose of the information.
- The *Council Operations Handbook* states that the RSC's purpose, in part, is to identify and prioritize regional research needs and to do so at least annually. There have been disconnects between what is stated in the *Handbook* and how the process has played out in practice. The PPMC has their research prioritization process outlined in their operations procedures. It would not hurt the NEFMC to do the same and to make statements about the RSC's purpose consistent with it. The role of the RSC should be more carefully described, but it is probably not the best suited to take the lead on research prioritization, given that its membership does not necessarily have the breadth and depth of technical expertise necessary, and may not represent the Council-wide perspectives. The RSC may be helpful in defining what is meant by a research priority, how priorities

would be binned and prioritized, giving input on the priorities, and in keeping tabs on if and how research priorities are being met.

- In terms of prioritizing the priorities, for the past few years, the Council has been identifying its annual management priorities through a process facilitated by the Executive Director. Individually, Council members bin a long list of possible priorities into categories (e.g., low, medium, high). Results get tallied and priorities receive a ranking score, which get presented to the Council as input for their deliberations. While it has been a challenge to get Council members to participate in the exercise, a similar process may be helpful to prioritize research priorities. It is certainly an efficient way to get input prior to a meeting. In this case, the exercise might be better suited for the SSC. Here is a suggestion:
  - PDTs and their Committees each could develop a list of research needs and rationale (e.g., overfished status, data poor stock, needed for a current or future Council action, how it would help meet a FMP goal, when is the information needed).
  - Staff would compile this information in a spreadsheet.
  - RSC would review the compiled information to ensure that each topic is indeed a research priority and give other input. Iteration with PDTs/Committees may be necessary.
  - SSC members would then, individually, be asked to rate research needs into 4-5 priority bins.
  - Staff compiles the ratings and scores each priority.
  - SSC review and final Council review and approval.
- This binning exercise could be done every five years. However, research needs continually arise, and it would be helpful to have a living document/spreadsheet/database to keep track of needs as they arise in the interim.
- There should be more concerted efforts to seek a regular update from NMFS on how the Council's research priority list is being used and which topics are getting addressed.