

## APPENDIX A Terms of Reference

The Terms of Reference (TORs) for the Review Panel are to answer the series of questions below. In doing so, it is important that the Panel respond in the context of the real world of resource limitations and imperfect processes and outcomes. Terms like “adequate” and “appropriate” should be addressed relative to norms and “best practices” for comparable situations nationally and worldwide.

*The New England Fishery Management Council (NEFMC) approved the original TORs in April 2017. The final TORs included in this document were slightly revised and approved by NEFMC on January 31, 2018.*

1. Evaluate the strengths and weaknesses of the foundations of fishery management used by the NEFMC. Are they adequate in terms of:

- a. Does the process take into account all applicable federal legislation and Executive Orders?
- b. Does the Council comply with and incorporate **NMFS** policy directives, strategies, and Implementation Plans (e.g., Magnuson-Stevens Act National Standard Guidelines, Policy for Ecosystem Based Fishery Management Roadmap, National Saltwater Recreational Fisheries Policy, etc.).
- c. The clarity, logical consistency, and completeness of **NEFMC** policies (e.g., Risk, Habitat, and Research Review policies)?
- d. The impact scientific information (stock assessments, economic and social impacts, ecosystem dynamics) has on the performance of the Council (e.g. is it good enough or do limitations of scientific information impeded performance).
- e. Professional support from Council staff, Agency staff, and participants in the process (e.g., academics, advisors from various f interest groups)
- f. Are the data collected that are necessary to inform timely management decisions? Do the Council and its supporting staff have ready access to the data? Are there limitations that inhibit timely use of data for management purposes?

2. Evaluate the strengths and weaknesses of the general process used by the Council to design and adjust fisheries management.

- a. Is the overall model appropriate in terms of number and scope of FMPs?
- b. Annual priority setting process (i.e. horizon for priorities, ability to maintain the same priorities all year, balance between required and discretionary tasks, etc.)
- c. Adjustments and changes to FMPs through amendments, frameworks, or other formal actions? Please comment on whether preparation of management actions follow best practices or use lessons learned from other regions.
- d. Roles of subsidiary bodies of the Council (Plan Development Teams, Committees, Advisory Panels, Scientific and Statistical Committee)?

- e. Mechanisms for coordination between NEFMC, NMFS, and other fishery management authorities (e.g., ASMFC, MAFMC, Canadian DFO, NAFO)?
- f. Does the overall model support an inclusive, transparent, and participatory public decision making process? Do decisions consider this input and comply with promulgated policies?
- g. Does the Council have an adequate system in place to measure performance of [biological, social and economic] goals and objectives in FMPs?

3. Using a representative subset of recent management actions, evaluate the strengths and weaknesses of how the NEFMC has performed in terms of:

- a. Responsiveness to scientific advice.
- b. Transparency, public participation, and documentation.
- c. Consideration of potential impacts when making decisions (i.e. habitat, economic and social impacts, cumulative effects, etc.).
- d. Timeliness of decisions and subsequent management implementation by the NMFS.
- e. Overall outcomes of actions taken on the environment (cumulative biological and social impacts).

4. If performance was deemed less than adequate for any of topics in TOR 1-3, develop recommendations to improve performance through responding to the following questions [for each weakness]:

- a. What is the problem?
- b. Why does the problem exist (i.e., what factors may have led to such an outcome)?
- c. Who is affected by it?
- d. What is the desired state relevant to your problem?
- e. What prevents that desired state from being achieved at present time?

5. Specifically for the operating environment identified at the beginning of this prospectus, build on preliminary recommendations (identified through TOR #4) to more successfully address the challenges in the future by responding to the following questions:

- 1. What action/initiative is recommended?
- 2. How would you implement this action or initiative (e.g., through a committee, agency process, NRCC, etc.)?
  - a. Review panel response
  - b. Council member response
- 3. Who is the lead agency/organization?
- 4. Who is the primary point of contact?
- 5. When would this start?
- 6. List any limitations this recommendation may come up against.
- 7. Once in place, how would you measure progress?

## APPENDIX B Review Panel Member Biographies

A six-member review panel was initially selected to provide a balance of three fishery managers and three fishery scientists from other regions as well as one with international experience. However, one of the fishery managers was ultimately unable to attend the program review meeting. All of the reviewers have a strong understanding of U.S. federal fisheries management. None of the reviewers had any recent affiliation with the New England Fishery Management Council (NEFMC or Council), industry associations, or conservation advocacy organizations.

- **Robert Beal, Executive Director, Atlantic States Marine Fisheries Commission** – Mr. Beal brings a unique, Maine-to-Florida state waters perspective to the table. He also is familiar with the operations of three different fishery management councils that are responsible for federal waters management of many of the same species ASMFC oversees in state waters.
- **Dan Hull, Chairman, North Pacific Fishery Management Council** – Mr. Hull is one of Alaska’s representatives on the NPFMC and has served as Chairman for the last four years. He has been fishing for over 30 years out of Cordova, Alaska, gill netting for salmon, and now long lining for halibut and sablefish. He owns and operates the 37’ commercial fishing vessel *Gretchen S.* In his career, Mr. Hull has also served in a variety of positions in fishing industry, research and management organizations in Alaska.
- **Dr. Pamela Mace, Fisheries Scientist, New Zealand** – Dr. Mace was a member of the NEFMC staff from 1989-91 and worked as a research scientist for NMFS from 1993-2004. She moved to New Zealand in 2004 and became the Chief Scientist for the former New Zealand Ministry of Fisheries, which was merged into the Ministry of Primary Industries in 2012, where she is now the Principal Advisor Fisheries Science in the Marine Branch. She has extensive scientific experience involving Canadian, U.S., and New Zealand fisheries, including the development of harvest control rules, standards for overfishing definitions and rebuilding plans, science quality assurance systems for reviewing and improving fish stock assessments and ecosystem-based fisheries management. Her role in this review is as an independent fisheries scientist.
- **Dr. Bonnie McCay, Board of Governors Distinguished Service Professor (Retired), Rutgers University**– Dr. McCay, an anthropologist, worked in the Department of Human Ecology within the School of Environmental and Biological Sciences at Rutgers. Her research and teaching have focused on challenges and policies for managing common pool resources such as fish and shellfish, with particular attention to intersections of ecology, community, and social institutions of science, law, and property. She was a member of the Mid-Atlantic Fishery Management Council’s Scientific and Statistical Committee for many years, and received the American Fishery Society’s Award of Excellence in 2013.

- **Dr. Kenneth Rose, France-Merrick Professor in Sustainable Ecosystem Restoration, Horn Point Laboratory, University of Maryland Center for Environmental Science** – Dr. Rose’s research centers on using mathematical and computer simulation modeling to predict and better understand fish population and food web dynamics in estuaries, lakes, reservoirs, and oceans. He has served on several advisory committees for the Gulf of Mexico Fisheries Management Council, and was member of the National Academy of Science's Committee on Evaluating the Effectiveness of Stock Rebuilding Plans. He recently was presented with the American Fisheries Society’s Award of Excellence.

**APPENDIX C**  
**Agenda**

**New England Fishery Management Council – Program Review Meeting**  
**Tuesday – Friday, March 13-16, 2018**

Hilton Garden Inn, Boston Logan Airport, 100 Boardman St., Boston, MA, 02128

Tel: 1-617-567-6789

<http://hiltongardeninn3.hilton.com/en/hotels/massachusetts/hilton-garden-inn-boston-logan-airport-BOSLOGI/index.html>

<b>Tuesday, March 13, 2018 – Day 1</b>	
<b>9:00 a.m.</b>	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• Council Chairman’s welcome – <i>Dr. John Quinn (Council Chair)</i></li> <li>• Introductions and agenda review – <i>Dan Hull (Meeting Chair, North Pacific Fishery Management Council, NPFMC)</i></li> <li>• Review of Terms of Reference - <i>Tom Nies (Council Executive Director)</i></li> </ul>
<b>9:45</b>	<b>Perspectives from Managers, Scientists, and Stakeholders</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Kim Gordon (Fisheries Leadership and Sustainability Forum)</i></li> </ul>
<i>Terms of Reference 1 (Foundations of Fishery Management) and 2 (Council Operating Model)</i>	
<b>10:15</b>	<b>Block 1: Legislation and Policy</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Tom Nies (Council Executive Director) and Kim Gordon (Fisheries Forum)</i></li> <li>• Review Panel Q &amp; A</li> </ul>
<b>11:00</b>	<b>Break</b>
<b>11:15</b>	<b>Block 1: Legislation and Policy (continued)</b> <ul style="list-style-type: none"> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <i>(Deliberations on Block 1 include TORs #: 1a, 1b, and 1c.)</i>
<b>12:10 p.m.</b>	<b>Lunch on your own</b>
<b>1:10</b>	<b>Block 2: Overall Model, Priorities, Management Actions &amp; Public Participation</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Tom Nies (Council Executive Director), Deirdre Boelke (Council Staff), and Kim Gordon (Fisheries Forum)</i></li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <i>(Deliberations on Block 2 include TORs #: 2a, 2b, 2c, and 2f.)</i>
<b>3:05</b>	<b>Break</b>
<b>3:20</b>	<b>Block 3: Support and Coordination</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Tom Nies (Council Executive Director) and Kim Gordon (Fisheries Forum)</i></li> </ul>

	<ul style="list-style-type: none"> <li>○ Panelists – <i>Dr. John Quinn (Council Chair), Terry Stockwell (Council Vice-Chair), Peter Hughes (Mid-Atlantic Fishery Management Council, MAFMC), Jason McNamee (Council SSC Chair), Dr. Eric Thunberg (Northeast Fisheries Science Center, NEFSC), Dr. Jim Weinberg (NEFSC), and Mike Ruccio (Greater Atlantic Regional Fisheries Office, GARFO)</i></li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Block 3 include TORs #: 1e, 2d, and 2e.)</i></p>
<b>5:30</b>	<b>Adjourn public meeting</b>
<b>5:45</b>	<b>Executive session</b>

<b>Wednesday, March 14, 2018 – Day 2</b>	
<b>8:30 a.m.</b>	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• Welcome and agenda review – <i>Dan Hull (Meeting Chair, NPFMC)</i></li> </ul>
<b>8:35</b>	<b>Block 4: Data and Performance Metrics</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Chris Kellogg (Council Deputy Director) and Kim Gordon (Fisheries Forum)</i> <ul style="list-style-type: none"> <li>○ Panelist - <i>Jason McNamee (Council Science and Statistical Committee Chair)</i></li> </ul> </li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Block 4 include TORs #: 1d, 1f, and 2g.)</i></p>
<b>10:30</b>	<b>Break</b>
<i>Term of Reference 3 (Recent Management Actions)</i>	
<b>10:45</b>	<b>Scallop Framework 27</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Deirdre Boelke (Council Staff)</i> <ul style="list-style-type: none"> <li>○ Panelists – <i>Mary Beth Tooley (O’Hara Corporation), Peter Hughes (MAFMC), Moira Kelly (GARFO), Peter Christopher (GARFO), and Travis Ford (GARFO)</i></li> </ul> </li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Scallop FW 27 include TOR # 3a – e.)</i></p>
<b>12:45 p.m.</b>	<b>Lunch on your own</b>
<b>1:45</b>	<b>Groundfish Amendment 18</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Dr. Rachel Feeney (Council Staff)</i> <ul style="list-style-type: none"> <li>○ Panelists – <i>Terry Stockwell (Council Vice-Chair), Maggie Raymond (Associated Fisheries of Maine), Ben Martens (Maine Coast Fishermen’s Association), Sarah Heil (GARFO),</i></li> </ul> </li> </ul>

	<p><i>Mark Grant (GARFO), Dr. Mike Simpkins (NEFSC), and Chad Demarest (NEFSC)</i></p> <ul style="list-style-type: none"> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Groundfish A18 include TOR # 3a – e.)</i></p>
<b>3:15</b>	<b>Break</b>
<b>3:30</b>	<b>Groundfish Amendment 18 (continued)</b> <ul style="list-style-type: none"> <li>• Review Panel Deliberations</li> </ul>
<b>4:30</b>	<b>Adjourn public meeting</b>
<b>4:45</b>	<b>Executive session</b>

<b>Thursday, March 15, 2018 – Day 3</b>	
<b>8:30 a.m.</b>	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• Welcome and agenda review – <i>Dan Hull (Meeting Chair, NPFMC)</i></li> <li>• Report out on Day 2 Executive Session</li> </ul>
<i>Term of Reference 3 (Recent Management Actions), continued</i>	
<b>9:00</b>	<b>Small-Mesh Multispecies Specifications (2015-2017)</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Andrew Applegate (Council Staff)</i> <ul style="list-style-type: none"> <li>○ Panelists – <i>Vincent Balzano (Council Member), David Goethel (F/V Ellen Diane), Moira Kelly (GARFO), Peter Burns (GARFO), Cynthia Hanson (GARFO), Dr. Russ Brown (NEFSC), and Dr. Tammy Murphy (NEFSC)</i></li> </ul> </li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Small-Mesh Multispecies Specs include TOR # 3a – e.)</i></p>
<b>10:15</b>	<b>Break</b>
<b>10:30</b>	<b>Herring Amendment 5</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Lori Steele (West Coast Seafood Processors Association, Former Council Staff)</i> <ul style="list-style-type: none"> <li>○ Panelists – <i>Doug Grout (Council Member) and Jennie Bichrest (Purse Line Bait), Peter Christopher (GARFO), Carrie Nordeen (GARFO), and Dr. Ming-Yang Lee (NEFSC)</i></li> </ul> </li> <li>• Review Panel Q &amp; A</li> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul> <p><i>(Deliberations on Herring Amendment 5 include TOR # 3a – e.)</i></p>
<b>12:30 p.m.</b>	<b>Lunch on your own</b>
<b>1:30</b>	<b>Perspectives from Managers, Scientists, and Stakeholders</b> <ul style="list-style-type: none"> <li>• Presentation – <i>Kim Gordon (Fisheries Forum)</i></li> </ul>
<i>Term of Reference 4 (Understanding the Issues and Developing Preliminary</i>	

<i>Recommendations - TORs 1-3)</i>	
<b>2:00</b>	<b>Term of Reference 4</b> <ul style="list-style-type: none"> <li>• Review Panel Deliberations</li> </ul> <i>(Deliberations on TOR 4 include responding to questions # 4a-e.)</i>
<b>3:00</b>	<b>Break</b>
<b>3:15</b>	<b>Term of Reference 4 (continued)</b> <ul style="list-style-type: none"> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul>
<b>4:45</b>	<b>Adjourn public meeting</b>
<b>5:00</b>	<b>Executive session</b>

<b>Friday, March 16, 2018 – Day 4</b>	
<b>8:30 a.m.</b>	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• Welcome and agenda review – <i>Dan Hull (Meeting Chair, NPFMC)</i></li> <li>• Report out on Day 3 Executive Session</li> </ul>
<i>Term of Reference 5 (Recommendations and Implementation)</i>	
<b>9:00</b>	<b>Term of Reference 5</b> <ul style="list-style-type: none"> <li>• Review Panel Deliberations</li> </ul> <i>(Deliberations on TOR 5 include responding to questions TOR 5 # 1 &amp; 2a.)</i>
<b>10:30</b>	<b>Break</b>
<b>10:45</b>	<b>Term of Reference 5 (continued)</b> <ul style="list-style-type: none"> <li>• Public Comment</li> <li>• Review Panel Deliberations</li> </ul>
<b>12:30 p.m.</b>	<b>Adjourn public meeting</b>
<b>1:30</b>	<b>Executive session</b>

***This meeting will be recorded. Consistent with 16 USC 1852, a copy of the recording is available upon request***



**APPENDIX D**  
**Individual Reviewer's Reports**

March 31, 2018

TO: Tom Nies, Executive Director  
New England Fishery Management Council

FROM: Dan Hull, Chairman  
North Pacific Fishery Management Council

RE: Panelist Report  
NEFMC External Program Review

This is a summary report of my activities, findings and recommendations as a panelist and Chairman of the Program Review Panel. It was a privilege to work with the other panelists and to learn from the New England Council members and staff, and representatives from NMFS and various stakeholder interests in the process.

#### Executive Summary

I agree with the overall findings and recommendations in the Panel's report to the NEFMC and will not attempt to further summarize them here. The Panel noted many strengths and a variety of opportunities for improvement in the Council's performance in fisheries management and conservation. The Panel then provided recommendations for TORs 1 and 2 questions, and how to implement them. Opportunities for improvement related to the four case studies were incorporated into the TORs 1 and 2 recommendations as being applicable to all of the Council's functions.

The TOR requested the Panel to respond to a series of questions "in the context of real world resource limitations and imperfect processes and outcomes", and to consider comparable situations among other Councils in particular. It's fair to say that among the eight RFMC under the MSA, there are varying degrees of effectiveness in how they meet all of their conservation and management responsibilities, how efficiently they operate, and the strengths of their partnerships and relations with partner agencies and the public. All Councils could find ways to improve their operations and their work, and would benefit from an internal review as well as comparative reviews with other Councils. In my view, the NEFMC performs very well and struggles with the same kinds of challenges that the NPFMC and other Councils face. For example, the ability to fulfill national policy directives and guidance; implement EBFM and incorporate climate change science into decision making; and improve social and economic data collection and to fulfill NS 8 remain difficult for all Councils. This program review and the Panel's recommendations should give the NEFMC confidence to address opportunities for improvement and to better fulfill conservation and management responsibilities under the MSA.

### Background and Activities

As described in the Prospectus, the NEFMC “initiated an independent review panel to assess its past performance, but more importantly, to identify improvements to its processes to successfully address ongoing and future challenges.” The Panel focused on improvements within the Council’s ability to manage, however given that the work of the Council is very dependent on relationships with partner agencies and organizations, especially NMFS, recommendations frequently recognized the roles of those partnerships.

Preparation for the program review initially involved several conversations with the Panel, Tom Nies and Jessica Joyce to review the TOR, agenda, program documents and SOW. I had several additional phone conversations and email exchanges with Tom and Jessica regarding my role as Chairman, and to review and revise the agenda, worksheets and flesh out the process for the review week.

Many documents were provided for the program review. I read the primary materials as well as some of the supplementary materials, and also reviewed similar documents internal to the NPFMC to better understand the NEFMC ‘model’. During the program review week, the Panel spent additional time in executive sessions in the evening discussing and developing the best way to complete the TOR requirements on the agenda and in preparation for a final report. The responsibilities for completing each TOR were divided among the Panel members, for review by all in a draft report. Since then, I have spent considerable time completing my TORs, as well as working with Jessica and the Panel to organize our collective responsibilities to review and complete the entire report.

### Key TOR Comments

My comments in this report highlight and elaborate on some of the specific areas of the TOR that I believe are most important for the NE Council. My comments are based on the documents and presentations in the review and the amount of time available for the process; to the extent they miss the mark it’s a reflection of a lack of time to do a more thorough review.

Each of the eight RFMC has evolved differently according to a variety of factors, such as historical fisheries, composition of stakeholder interests, number of states and other entities involved, relationships between industry, managers and scientists and other factors. Thus the structure and operations of the NEFMC, and its relations and interactions with the public and partner agencies are unique in a number of ways and it’s not always possible to translate the practices of one Council to another.

The structure and operations of the NEFMC ‘model’, including it’s subsidiary bodies, warrants further review by the NEFMC and comparison with the model of other Councils. It does appear that the number of FMPs and subsidiary bodies creates greater complexity for management and administration. It also seems that there could be an incentive for each FMP and it’s subsidiary bodies to work as ‘silos’, to ensure that their interests are addressed by the Council in a timely manner. FMP

fisheries with greater social and economic and social importance will tend to attract more interested staff from the Council and agencies, and greater participation from stakeholders, if they recognize that a high functioning group can get there issues through the Council efficiently. In contrast, underperforming stocks and fisheries with stock assessment or data collection problems may not attract as strong an interest from Council staff, and agency and industry participation, and so may not be as high functioning in the Council operating model. This could create competition between FMPs in a number of ways and undermine the ability of the Council to adequately address the broader interests of all fisheries and FMPs. There wasn't enough time for the panel to explore the extent to which this occurs, however, it seems to be a possibility based on the materials and presentations.

There are two other potential downsides to the 'silo' structure of the NE Council model to highlight. One is that it tends to separate the work and interests of stakeholders in one FMP from those of another FMP. There is great benefit in the exchange of ideas, information and experiences of stakeholders across all FMPs. It creates common understanding of shared problems and solutions, and improves relations between stakeholders, scientists and managers. It can also create operational efficiencies for the development of actions in an FMP.

The other potential downside is related to the sequential nature of public input into Council actions. This occurs in terms of the time delay or lag between port meetings, AP and Committee and PDT meetings, and action by the Council. When deliberations and final actions by the Council do not match the discussions and recommendations of the public and subsidiary bodies, and the public and subsidiary bodies are not present to hear why, then public trust and confidence is eroded. This will occur regardless of whether the Council actually took the views of the public into consideration. In contrast, when the Council and its subsidiary bodies meet concurrently or as closely together as possible in time, location, and representation of participants, there is a greater likelihood that the public will understand why the Council acted as it did, even if there is disagreement with the action.

My perspective is based on my experience in the North Pacific Council, and an academic background primarily in the social and economic side of fisheries management. In contrast to the NE Council the North Pacific has a very simple structure, with three primary and two minor FMPs, one Advisory Panel, and four Plan Teams that focus mostly on stock assessments and development of SAFE report. Analyses for FMP and regulatory changes are done by teams of Council and agency staff under the terms of the ROA. The SSC, AP, Council and sometimes Committees all meet concurrently over a 8-9 day period. This allows for a full exchange of information across bodies and interest groups, who can track the views and deliberations that reach the Council for action.

The NEFMC shouldn't consider making a wholesale change to the structure of its model of operations to match that of the NPFMC or any other Council. However, it would be beneficial to consider how to improve the processes within the existing

structure of the NEFMC model of operations, to address the current challenges identified by the Panel. By reviewing the structure and processes of other Councils operating model, the NEFMC may discover feasible and effective ways to improve.

H. Daniel Hull  
H. Daniel Hull

3/31/18  
Date

Individual Panelist Report  
Bonnie J. McCay  
NEFMC Contract Number 18-06  
New England Fishery Management Council Program Review

It was enlightening to spend time with the team, members of the staff of the New England Fishery Management Council, and others engaged in its work to learn about the Council and work together to assess its strengths and weaknesses in relation to its tasks and goals. I came to the task with a background in social science research on fisheries and fisheries management and acquaintance with two other fishery management organizations in the region, the Mid-Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission. I left with a newfound appreciation for the challenges and accomplishments of the Council and the larger fisheries management system.

I fully support the Panel's recommendations. In this report I will largely focus on the social and economic dimensions of the Council's work, including its interactions with stakeholders and the public. To the latter, the Council deserves credit for taking great care in its processes and practices to be inclusive and to allow interested members of the public opportunities to access information and speak to issues at hand. The Council prides itself on this and well it should. There is always room for improvement, and in our report we discuss some of these, including finding ways to make it easier and more productive to read Council documents. However, it was and is evident that the Council has gone a long way in that direction already.

The herring and groundfish amendments described for us in this review took a long time to complete in part because of changes in objectives and alternatives due to input from stakeholders who expressed major and changing differences of interest and opinion. Our panel recommended that clear goals and objectives be stated and agreed upon at the outset and periodically revisited, as a way to help keep actions focused on the original purpose (TOR 2c 1), and that there be a process that is triggered by early warning signs of a troubled action to address issues early (TOR 2c 2). We also recommended that new issues that may arise during work on a framework action or plan amendment be addressed at first through discussion papers or similar approaches to scope out the problem or concern (TOR 2c 4). Here I add that in a democracy it is not always possible to get full agreement or buy-in on clear goals and objectives at the outset. This has many reasons, including deep differences among the parties, and thus the process is often one of "muddling through," (Lindblom 1959), whereby policy-making evolves somewhat messily and incrementally rather than proceeding from clear plans and assessments of pros and cons. But successful "muddling through" requires revisiting the goals and objectives, even if that does not happen right away (Lindblom 1979).

We read in the Fisheries Forum report about a perceived decline in participation, especially by people who are personally engaged in fishing. We commented on the need to find ways to get more participation in the Advisory Panels, scoping meetings and other public hearings, and public comments times in Committee and Council meetings. Years ago I learned about the "ladder of participation," the observation that there are different degrees and qualities of

public participation in policy (Arnstein 1969). At one end the members of the public or stakeholders (however defined) are there to be told about decisions made by a governing body; at the other end they are full partners in coming to decisions. In between are gradations, such as when the representatives of a policy-making group are there to listen but do not do so, or that they do listen and take what they hear into account, on balance given legal mandates and other considerations. It is this last that the Council needs to be sure that it shows it is doing. It is only too easy these days to become distracted, with cell phones and laptops, and to forget about the importance of direct engagement with those who take the trouble to participate. Simple etiquette can make a difference, such as that when members of the public take their turn to speak, the Council or Committee members hosting the forum pay close attention, acknowledging at least through their eyes and body language but also perhaps through follow-up questions or comments that the speakers are being heard.

More challenging is finding ways for the knowledge of fishermen and others with extensive experience to interface with the workings of the Council, given the formal processes involved and requirements such as reliance on the “best available scientific knowledge.” The Advisory Panels are just that, advisory, with no voting power, and public comments can inform but are also ‘merely advisory.’ It is therefore a challenge to keep people engaged in meaningful and constructive ways. We learned of instances where the Advisory Panels meet with Council committees, which seem good ways to show respect for the advisors and their input. “Anecdotal” is a label often given to that input, and often with a derogatory connotation, but we all know that anecdotal information can be valuable, to complement information that passes scientific scrutiny. The Council appears aware of this and deserves credit for continuing to be open to informed participation, despite the frequent costs of “muddling through”. I cannot help but recommend looking into the use of “fishery performance” reports as developed by the Mid-Atlantic Fishery Management Council, as one way to systematically gather information of this kind that can be useful, especially as the SSC and Council try to handle data-poor management issues.

Finally, I wish to compliment the Council and the NEFSC for moving forward in the systematic use of social and economic data in fishery management plans. The Social Sciences Branch of the Center has collaborated with social scientists at other Centers to come up with well-designed data on indicators of the impacts of fisheries management measures on human communities (Colburn et al. 2016). Center and Council staff recently incorporated those and other “social indicators” directly in Multispecies Groundfish Framework 52 and referenced them in FW 53. They were used in the Omnibus Habitat Amendment 2. A social impact assessment for the Monkfish FMP also included these social indicators. This is a significant move forward toward full compliance with National Standard 8, on fishing communities, as well as relevant Executive Orders, and I encourage continued work toward that goal. .

References cited:

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## New England Fishery Management Council Program Review

### Individual Report

Robert Beal

I appreciate the opportunity to serve as a panel member on the New England Fishery Management Council Program Review. While I am familiar with many of the Council's activities, I came away from the process even more impressed with the effort and dedication of the Council staff, Council members, and their many partners involved with New England fishery management. I fully support the Panel Report and the recommendations contained therein. This individual report highlights some of the areas of particular interest to me.

#### Stakeholder Input

The Council operates in a complicated physical and political environment with many culturally and economically important fisheries. In order to accommodate the variety of stakeholders in the region, the Council makes every effort to provide public input opportunities and decision-making transparency. This openness, at times, results in decreased efficiency and confusion by virtue of the multiple venues provided for public input and how input at different points in the management process ultimately inform final decision-making. For example, when Council final actions differ from stakeholder, PDT, or Committee recommendations, there can be confusion unless the public is able to attend each step of the process. The other outcome of the multiple comment opportunities is that individual stakeholders are often precluded from participating in every meeting, limiting full participation to environmental organization staff and professional fishing industry representatives.

#### Data Acquisition

The New England Council has been a partner in the Atlantic Coastal Cooperative Statistics Program (ACCSP) since 1995, however, the Council infrequently utilizes the ACCSP resources when developing or analyzing fishery management measures. This statement is not intended to be critical of the Council, rather it is made to highlight a disconnect between ACCSP and one of its partners. The compilation of needed data is currently done through a variety of approaches that vary by staff member or task. The refinement and use of a central database would improve efficiency, accuracy, and repeatability of data acquisition. The Council should engage with GARFO and NEFSC to improve the utility of centralized data collection and warehousing programs (i.e. ACCSP) to improve the speed and ease of obtaining data, as well as consistency.

#### Collaboration

As we all know, the physical environment along the Atlantic coast is rapidly changing. Increasing water temperature and ocean acidification, in addition to potential shifts in ocean currents, are affecting the distribution, abundance, and productivity of many important fishery resources. The complex fishery governance structure along the Atlantic coast requires

increased communication and collaboration between the three Atlantic Regional Councils, NMFS, and ASMFC to address these changes. The Council is making notable progress with the increased use of liaisons and Committee members from neighboring Councils. Increased collaboration should focus on ensuring the geographic distribution of fishery resources is matched by the distribution of fishery managers. The Atlantic coast management entities should also strive to minimize duplication and inconsistency.

#### Process and Progress Review

We learned during the staff presentations that the Council held meetings on more than 200 days in 2017. While this pace is impressive and commendable, it leaves little time to pause and reflect on procedures, progress toward FMP goals, and lessons learned. The Council should find some time to invest in reviewing how things are going (this review is an important step). I feel confident that time spent analyzing FMP progress or meeting with regional office staff to discuss content of Council documents will result in improved efficiencies to help keep pace with concerns. During the presentation, we heard about differences between Council and Mid-Atlantic Council requirements which was puzzling since both operate through the same regional office.

#### Forward-Looking

The Council has taken a number of commendable forward-looking and ambitious steps that should be continued. The transition to ecosystem-based fisheries management for the Georges Bank ecosystem is an impressive endeavor. The Management Strategy Evaluation for Atlantic Herring was also a noteworthy initiative. The Council is encouraged to continue to seek forward-looking solutions to the complex and difficult management issues it is facing.

#### Final Thoughts

I compliment the Council for taking the initiative and committing the resources to complete this Program Review. While the Panel identified many recommendations in the report, this is not an indication that the Council is not producing impressive results. The passion of the staff and Council members is obvious in their commitment to effectively managing the resources in their region. I look forward to assisting the Council in any way I can as you work through the recommendations provided by the Panel.

## NEFMC Program Report Individual Review

Dr Pamela Mace  
Fisheries Scientist  
New Zealand

My involvement in US fisheries includes two years spent working as a member of the NEFMC staff many years ago (1989-91), 10 years working for or with NMFS Headquarters, the Northeast Center and the Southeast Center, and four years undertaking senior postdoctoral or contracted work. Since moving to New Zealand 14 years ago, I have continued to stay abreast of developments in US fisheries, but have only had peripheral involvement. Returning to undertake this review has been a fascinating experience for me – it is interesting to see how much has changed, both for the better and otherwise.

The level of professionalism, dedication and involvement of multiple players has, if anything, intensified. The fisheries are for the most part – although not across the board – in far better shape. However, the requirements of the system have also intensified, with everything that was difficult to do then still in place, and many more demands layered on as well. There is now considerably more prescription and less flexibility.

My observations from participating in this review are all incorporated into the main Panel report; here I will restrict my comments to a few areas of greatest interest to me: the science (its quality, its ability to meet the demands placed on it), relationships (what is working, the scope for further improvement), and the need to prioritize and simplify processes (focusing only on a few of these).

Review contributors were overall very positive about the high degree of professionalism, dedication and technical skills of those who support the processes and the interactions between them. Industry input is much more organized and appreciated. Most working relationships have improved immensely and there is greater collaboration. The Council, Center and Region have all taken steps to improve communication by hiring dedicated staff and offering courses. Communications for controversial issues are often proactive. There is generally good staff to staff coordination and a shared sense of accomplishment. But of course there is always room for improvement, and I elaborate on some of these areas below.

The NEFMC appears to be quite innovative, potentially progressing a number of emerging issues further than other Councils. A good example is the Management Strategy Evaluation (MSE) for herring; the NEFMC is the first Council to go through the full MSE process of stakeholder input and the development of an operating model. The use of EBFM for the Georges Bank ecosystem is also ambitious and, while this Council is not the first to develop a Fisheries Ecosystem Plan (FEP), it is nevertheless an undertaking to be commended. The Council has also been proactive in raising awareness and initiating processes to deal with the impacts of climate change. The Center is also attempting to take account of some aspects of climate change and other ecosystem issues in stock assessments, and the Council should work with them to continue these efforts. I am heartened by the development of bycatch reduction methods and other gear technology developments to reduce fisheries interactions as well; e.g., raised footropes to reduce the catch of red hake, which is a bycatch for several other fisheries.

There has been a step-change in the way information is disseminated, facilitated of course by advances in technology. The amount, type, format and accessibility of information provided is far in advance of what was possible a couple of decades ago, and the Council and others have taken full advantage of it, including providing both high-level summaries for those who wish to

obtain an overview of issues, and more detail for those who wish to drill down. The NMFS website is also impressive, and the links provided between the Council and NMFS websites are useful. More work however is needed in providing summarized information in a meaningful and timely manner.

The system has become more complex than the data and analyses, particularly scientific analyses, allow, which also affects the ability to meet demands in a timely manner. While the MSA, National Standard Guidelines, NEPA, Executive Orders and various other policy directives have resulted in standardized protocols and ensured that overfished stocks are put on a path to recovery and that overfishing is not allowed to persist, they have also resulted in processes that have become overwhelming. As it is not possible to do everything with current resources, there is a need to determine how thoroughly each requirement needs to be addressed and how to prioritize such requirements. NEPA is probably the most complex part of the process. I realize that the Council and the Region have made attempts to streamline and simplify the process of addressing NEPA requirements, but I believe they need to continue to further explore such opportunities, while still meeting its fundamental mandates.

I applaud all efforts to simplify and streamline; for example, the development of framework processes for fast-tracking certain relatively simple, management actions, Supplemental Information Reports rather than full Environmental Assessments, and benchmark vs operational assessments that have lower time and resource commitments including peer review. The Council, Center and Region have all attempted streamlining and simplification processes. However, they should progress this even further; e.g., further consider a Programmatic EIS that can be used to bypass or mitigate the need for a new EIS for every new action.

There is no doubt about the high caliber quality of the personnel involved in providing data, analyses and other information to the Council to inform their management decisions. Within the constraints of overly burdensome requirements, they do an excellent job for the most part. The quality and quantity of input data appears to be more of a limitation than the models and methodologies themselves. This is particularly troublesome for low information stocks, and even more so when they have the potential to become choke stocks. I realize that a simple shift in or augmentation of resources towards these stocks will not necessarily ensure they can be lifted out of the low information category. It generally takes several years of consistent data collection to even begin to conduct more rigorous assessments, and even then there is no guarantee that such data will be up to the task.

Rebuilding plans are another specific area that needs to be rethought. Obviously this needs to involve more players than the Council alone. However, the already-observed changes in fish distribution, and possibly stock structure and productivity mean that rebuilding plans designed in a previous period may no longer be relevant and the previously-agreed targets and timeframes set in those plans may need to be adjusted. More work is needed on ways to specify rebuilding plans that incorporate the potential for future substantive changes in environmental conditions.

There appears to be a considerable amount of cooperative research in New England. But, with the possible exception of scallops, there is a need for greater uptake and visibility of cooperative research. There is also a need for more feedback on how industry-acquired research is used. The Center has implemented a process to improve the transparency of stock assessments and increase the utilization of cooperative research, which is to be commended. Also valuable was a study to improve the timeliness of stock assessments, which was initiated by the Council with Center involvement. More work needs to be done to increase timeliness and minimize lags

between the data being collected and then made available, analyses being conducted and then used, and decisions being made.

The key relationship in need of improvement identified during this review is that between the Center and stakeholders. The relationship was believed to be overall positive for cases involving well-performing stocks, but often fraught for underperforming stocks. In the latter cases, stakeholders often question the validity of the science. There is also a perception that the Center does not adequately value, or reward, participation of its staff on PDTs and its essential role in providing high quality biological, economic and social analyses to this group. The Center reward system is mostly focused around rewarding original research and publication, with the types of analyses performed for PDTs rarely qualifying. I do not know if it is possible to modify the reward system sufficiently that participation in PDTs can be seen as an important and integral role, given that it is part of the *raison d'être* for the Center, but I believe it is something Council leadership should explore with Center leadership.

From my (small country) New Zealand perspective, I also question the value of the many layers of peer review currently undertaken in the US (not unique to the Northeast). Stock assessments are by their nature uncertain, but it is never possible to resolve all uncertainties through more and more peer review. Rather, new assessments undertaken with adequate frequency, along with the collection of ancillary data, ought to be the key mechanism for decreasing uncertainty over time. I know that new assessments do not always lead to this outcome, but I believe it would be beneficial to consider the possibility of redesigning the system so that fewer layers of peer review might result in more time available for other activities such as designing data collection programs to resolve uncertainties, or other stock assessment improvement activities, or simply having the luxury of diverting resources to more fruitful activities. Of course, any reform should be limited by the proviso that there is little or no erosion of the integrity of, or confidence in, the current science system.

The Council needs to ensure that all Steering Committees, ad hoc committees and processes add value. For example, many different groups are involved in developing research priorities – the RSC, the Council, the Center, the Region, the SSC, other Councils, the ASMFC, the Cooperative Research Programme, the Saltonstall-Kennedy program – and the degree of communication and uptake between them is unclear. More coordination is needed. The effectiveness of the Research Coordinating Committee in this regard is questioned. It has an important role in reviewing research not subject to peer review by other bodies but its role in developing research priorities, and coordinating these with the priorities of other groups is unclear. It is also unclear how it interfaces with the Center and the Region, each of which have their own research priority-setting processes.

Who should specify either research or data needs or both? Obviously all entities have a role to play but, in my view, it would be most appropriate to take a top-down approach. The starting point would be to determine the needs of fisheries management for the next 1-5 years (and possibly beyond, in order to provide a context for future staff hiring needs); the science to support the Council shouldn't be done in a vacuum. Scientists and managers together then need to determine the models and analyses that will best support the management needs. Finally, data collection priorities and improvements to support both research and management need to be specified, probably in a group involving representatives of all relevant management, research and data collection entities, including the cooperative research program.

Mechanisms for using public input in scientific processes need to be clarified. The benefit of public input in stock assessments is clear, particularly if fishermen are providing the input. Fishermen can communicate changes in fishing behavior that may affect the distribution and

species composition of catches, and therefore the interpretation of data inputs to stock assessment models. However, they may be discouraged from attending if discussions become highly technical. While public participation should continue to be allowed at all stages, it might be more efficient to encourage stakeholders to focus their participation on those meetings or parts of meeting where they will add the most value. The level of satisfaction from stakeholders is likely to be influenced by their perceptions about the extent to which their input is valued – although it is also likely that satisfaction is highly correlated with the status of the stocks and of the associated fishing fleets of direct interest to stakeholders.

Advisory Panels are an important part of the overall process but representation can be unbalanced, with certain interest groups having little or no representation. Opportunities for participation seem abundant and back to back meetings of related groups also help. Yet participation is apparently declining, with few young people coming through, with the exception of the scallop industry. It is possible that as issues get resolved, the need for participation naturally drops, and that reductions in fleet capacity have also resulted in fewer players. It is difficult to determine how to increase attendance or other forms of participation, but efforts need to be made to ensure all who wish to be heard have both the opportunity and the incentive to provide input.

In my view, recreational advisors should actively participate in relevant advisory groups rather than having a separate group focused only on recreational interests. I believe this would result in a better balancing of the interests of all stakeholders.

It may also help to develop rules of participation for meetings involving public input (as well as other meetings) if these do not already exist. For example, participants should be required to commit to following up on agreements and tasks; adopting a constructive approach; avoiding repetition of earlier deliberations, particularly where agreement has already been reached; facilitating an atmosphere of honesty, openness and trust; respecting the role of the Chair; and listening to the views of others, and treating them with respect. In New Zealand, we have a similar although somewhat longer list of requirements for participation in our working groups and have found it useful to refer to when the input from some vocal participants is unhelpful.

The NEFMC uses Committees to a greater extent than other Councils, resulting in a reduced number of full Council meetings each year. This is probably more efficient but it carries the risk of fragmentation. A greater level of coordination might be beneficial, along with processes for communications and some form of decision-making, at least for decisions deemed to be of lesser importance, between Council meetings. There also seems to be an unequal treatment across FMPs. Scallops and groundfish get the most bandwidth. Some issues, such as climate change and EBFM, cut across several FMPs. Due to these cross-cutting issues, and to species interactions and potential changes in their distribution and/or productivity, it may be useful to consider merging some committees in the future. Climate change and resultant changes in fish distributions may also necessitate more joint plans / merging jurisdictions between the MAFMC and possibly ASMFC as well.

To ensure more effective work processes, the Council needs to reduce the number of priorities it sets each year, and to resist further loading the list each year without removing or simplifying previous requests. Better alignment between priorities and the capacity of staff and other analysts is needed. The formal Action Plan process that has been developed is excellent, but its utility is undermined if it is changed too frequently during the year. There is however a need for flexibility as it is inevitable that new priorities will continually emerge, while the importance of others will diminish. It is also likely that some requests that seemed relatively simple initially may end up not panning out this way; this means that there may be a need to deprioritize other

requests. Council staff need to be empowered to create workable solutions during the process of developing management actions. The PDTs also need to take an active role in reprioritization activities, particularly if they are asked do analyses that cannot be undertaken with current data. The interface between each Committee and its PDT needs further development. Of course, the PDTs (and the Committees) should not be a force unto themselves, but there is value in creating closer and stronger working relationships between all interacting entities.

More time to reflect on procedures and processes in place would be beneficial for all involved parties. Judging by previous reviews that have taken place on specific issues, this does get done from time to time, but the impression I formed during the current review was that there is so much to do that racing to meet deadlines takes on a far higher level of urgency than thinking about how to do better. It also appears that many recommendations from previous reviews have yet to be implemented – again probably due to a lack of time to address them. Sifting through recommendations from previous reviews and tagging them for implementation should be afforded higher priority.

The two case studies of processes that didn't pan out well (Herring Amendment 5 and Groundfish Amendment 18) are examples of the need for reflection. The reviewers heard that some lessons were carried forward from the herring example, but less so for the groundfish example. It appears that full post-mortems of these two cases were not conducted, even though there were potentially valuable lessons to learn from each that may help avoid similar situations in the future; for example, determining whether there should be a stopping point for actions that are not progressing to plan. Reflection on examples that went well (Atlantic Sea Scallop Framework 27 and Small-mesh multispecies 'whiting' specifications from 2015-17) could also provide insights that could be adapted to support future management actions.

Finally, I would urge the Council (and the Center, the Region, the SSC, the PDTs and the APs) to keep up the great work of continually striving to improve both the status of the fisheries themselves (the stocks and the fishing fleets) and the processes for monitoring, researching and managing them. Recommendations from previous general or targeted reviews should continue to be implemented.

Thank you very much for the opportunity to participate in this review. I thoroughly enjoyed interacting with former colleagues, new Council, Center and Region staff, the industry and other stakeholders, all of whom gave up considerable time and contributed generously to the discussions.

Individual Peer Review Report  
Kenneth A. Rose  
NEFMC Contract Number 18-06  
New England Fishery Management Council Program Review

**Purpose**

This memo is the individual report from Kenneth Rose on the NEFMC Program Review. This is in addition to the Panel review report. I fully endorse all of the recommendations of the Panel report. The purpose of this individual report is to note some highlights from the Panel report that I want to especially emphasize and to add additional thoughts not covered in the Panel report. The content of this individual report are entirely my own and do not purport to represent the Panel.

**Methods**

The methods used are described in the Panel review report. Briefly, background documents were provided, which was followed by a 4-day workshop. The general approach was to use several case studies as the basis for identifying strengths and areas for improvement, which then formed the basis for formulating more general recommendations. The recommendations were designed to improve the operations of the Council and especially the Council staff and thus were forward looking. The case studies were not examined for the effectiveness of whether past decisions.

**Trust and transparency as underlying issues**

While covered in the Panel report, I want to emphasize the human and inter-personal aspects of the activities of the Council and Council staff. The background readings, case studies offered, and throughout the 4-day workshop, the issues of trust and transparency were often underlying the issues and discussions. This is prevalent throughout fisheries management, and not just specific to the NEFMC. Without trust, the rest of the process often fails. A good operational definition of trust was offered by Neeley (<http://compassblogs.org/blog/2013/08/12/trust-in-science/>) on the COMPASSblogs.

Trust is:

“Your willingness to embrace the advice of a group of strangers because you believe they

- (a) know the truth
- (b) will tell you the truth as they know it;
- (c) have your best interest at heart,



all of which depend on:

(d) who you are

(e) who they are

(f) what you're talking about."

The effectiveness of the Council is critically dependent on the degree of trust other scientists and stakeholders have in the management process. I urge the Council and Council staff to be cognizant of how they engage the science community and stakeholders so that the trust is maintained. A common saying is: "Trust takes years to build, seconds to break, and forever to repair."

Transparency is critical aspect of building trust. The Panel report discusses how document and information availability is necessary but not necessary and sufficient to ensure a sufficient level of transparency. It was clear to me during the review that the Council and Council staff make significant efforts to have public meetings, many options for stakeholder input, and make the documents available on a friendly web site. This is the necessary for transparency. I want to emphasize that the transparency could even be further improved by expanding on the Council's scientific communication efforts. How to implement this is best left to the Council and Council Staff but I encourage they give thought to not only making information available but also how to effectively communicate the information to further enhance transparency. This is especially important for those stakeholders and others not intimately involved with the management process.

### **Personal reflections on the TORs**

One striking feature of the Council staff activities is the large number of items being dealt with at any given moment and the complexity of some of the work streams. Overlain on this is the ever present notion that things are taking too long and people are getting impatient for the real or perceived lack of progress. The fisheries management process seems to always be getting more complicated with more steps and more documentation; things do not ever get simplified. This is the backdrop on which Council staff operates day after day. In that regard, the staff, and its leadership, are performing well. This does not mean that there have been missteps on specific actions; however, in general, the Council staff is to be recognized for their efforts.

While it is appropriate that Council staff works under deadlines and scrutiny, there are several issues that emerge. One issue is that it becomes extremely important to ensure the staff is operating as efficiently as possible. Carefulness and transparency must always be maintained. Somehow time must be found to pursue the Panel recommendations, many of which address, at least partially, the efficiency of the operations. A second issue, again covered in the Panel report, is the need for reflection, lessons learned, and professional

development. These are typically the activities that get delayed and lost as staff must juggle multiple tasks and move from one tasks immediately to next. There will be short-term costs of pursuing this group of recommendations but there is pay-off in the longer-term; I encourage the Council and Council leadership to find a way. Finally, it is easy for cooperation to become frustrating when deadlines are looming and the process seems slow. Many of the Panel recommendations relate to cooperation between people and among the Council, GARFO, and NEFSC. This is another example of some investment now for payoff in the longer-term.

### **Final remarks**

I was impressed with the Council leadership and staff during the Panel interactions at the workshop. There was an openness on sharing the successes and failures that was a very good sign. In my personal opinion, the Council staff is on a good pathway going forward, with the understanding that there are many opportunities for improvement. The Panel report offers ideas for improvement that should help guide the Council and Council staff going forward. The next step of an implementation plan, using some subset of the recommendations, should be pursued quickly to maintain the momentum generated by the Panel report.

*Kenneth A. Rose*

April 13, 2018

Kenneth A. Rose

Date

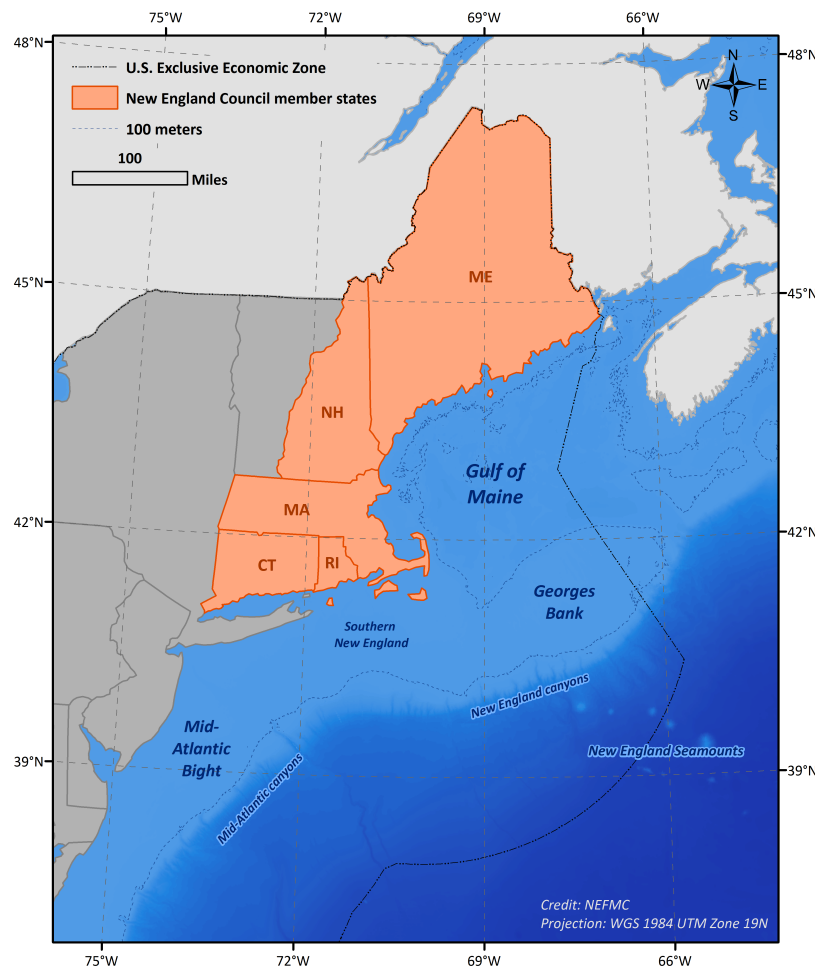
## APPENDIX E

### Background Information on the New England Fishery Management Council

#### NEFMC Framework

The New England Fishery Management Council (NEFMC) is one of eight regional fishery management councils in the U.S., established by the Magnuson-Stevens Act (MSA) in 1976 to conserve and manage fishery resources in federal waters within its geographical jurisdiction. The NEFMC manages stocks from 3- to 200- nautical miles off the coasts of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut.

The management authority of the Council extends to the Gulf of Maine, Georges Bank, and southern New England, and overlaps with the Mid-Atlantic Fishery Management Council (MAFMC) for some species in that region. Major ports include Portland, Maine; Gloucester and New Bedford, Massachusetts; and Point Judith, Rhode Island. Figure 1 depicts these New England region and broad stock areas.



**Figure 1 – Geography of the NEFMC Management Areas**

The Council staff is comprised of an Executive Director, a Deputy Director, a public affairs officer, ten technical staff members, and four administrative personnel who support the Council itself. The Council is made up of 18 voting members that are organized as follows (positions listed in the first two categories do not have term limits):

- The Regional Administrator of the Greater Atlantic Regional Fisheries Office (GARFO) within the National Marine Fisheries Service (NMFS, or NOAA Fisheries) or a designee.
- The five principal state officials with marine fishery management responsibility (or a designee) for Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut.
- Twelve members nominated by the governors of the New England coastal states and appointed by the Secretary of Commerce for three-year terms (they may serve a maximum of three consecutive terms).

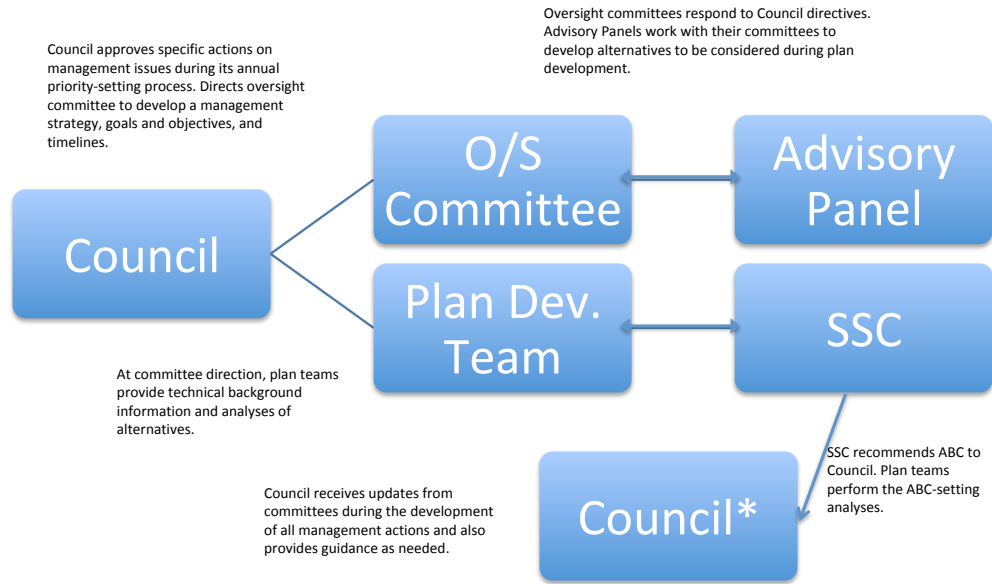
In addition, four non-voting members represent the U.S. Coast Guard, U.S. Fish and Wildlife Service, U.S. Department of State, and the Atlantic States Marine Fisheries Commission (ASMFC). Another non-voting member is a liaison from the Mid-Atlantic Fishery Management Council (MAFMC).

#### Fishery Management Plans and Subsidiary Bodies

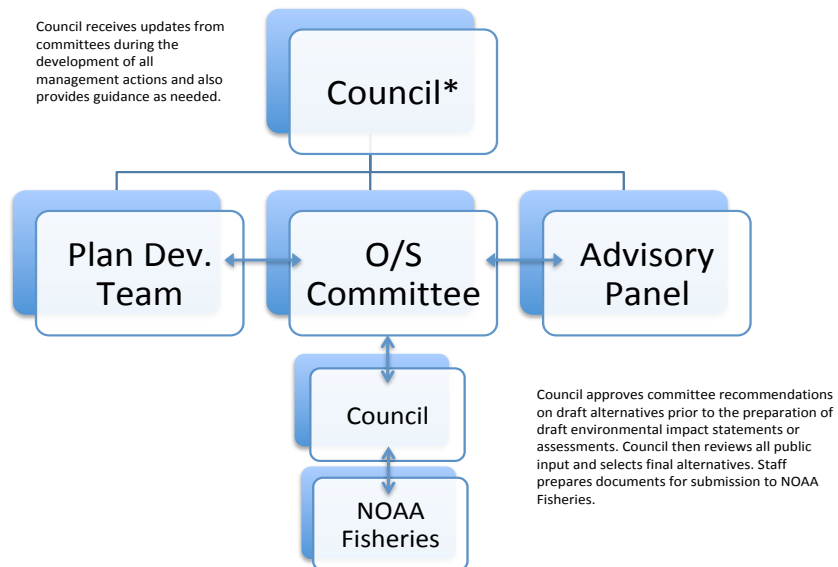
The NEFMC currently oversees ten fishery management plans (FMPs): Atlantic Herring, Atlantic Salmon, Habitat, Monkfish, Northeast Multispecies (groundfish), Red Crab, Skates, Sea Scallop, Small Mesh Multispecies (whiting), and Spiny Dogfish. Monkfish and Spiny Dogfish are jointly managed with MAFMC. Winter flounder and Atlantic herring are managed by the NEFMC in federal waters and by the ASMFC in state waters.

In general, each plan has a Committee, an Advisory Panel (AP), and a Plan Development Team (PDT) (Atlantic Salmon is an exception). There is also one Scientific and Statistical Committee (SSC) that provides scientific information to all management plan committees and the Council. Figure 2 depicts how these committees coordinate with each other and the NEFMC. Brief descriptions are also provided below.

# Fishery Management Plan Process



## FMP Process - continued



**Figure 2 – NEFMC Organizational Structure – FMP Development**

A **Committee** is established by the Council for each FMP, or group of FMPs, or on the basis of cross-cutting issues (e.g., Habitat Committee), to develop alternatives for actions related to the FMP or issues. The committee brings forward recommendations for alternatives, and preferred alternatives, to the full Council for consideration and final approval. Its members are usually all members of the Council or members of the MAFMC.

**Council Advisory Panels (APs)** that meet the requirements for a fishing industry advisory committee (FIAC) are charged with carrying out the objectives and duties for a specific FMP or management problem, listed in the NEFMC's Regional Operating Agreement (ROA) with NMFS. The Council may establish or abolish its APs as necessary. Members are usually knowledgeable stakeholders from fishing industries or other interest groups.

**Plan Development Teams (PDTs)** provide an expanded pool of expertise for the purpose of conducting data analyses and providing information to the Council. The PDTs also help ensure that Council FMPs, amendments and framework adjustments meet scientific, legal and technical requirements for review and approval. The Council's Executive Director appoints all PDT members based on the criteria listed in the PDT Policy within the NEFMC Operations Handbook. PDTs are chaired by Council staff and may include representatives from GARFO, the Northeast Fishery Science Center (NEFSC), academia, and state agencies.

The **Scientific and Statistical Committee (SSC)** assists the Council in the development, collection, evaluation, and peer review of statistical, biological, economic, social, and other scientific information relevant to the development and amendment of fishery management plans. It serves as the primary scientific and technical advisory body to the Council. The SSC is made up of scientists that are independent of the Council.

In addition to the committees and APs for each NEFMC management plan, there are a number of standing committees and ad-hoc working groups. A few examples include: Ecosystem-Based Fishery Management Committee, Research Steering Committee, Risk Policy Working Group, and the Fishery Data for Stock Assessment Working Group. More information on the purpose and membership of these committees is available on the NEFMC website:

<https://www.nefmc.org/committees>

#### Fishery Management Plan Regulatory Process and Interagency Coordination

The process by which regulations are developed by the Council and its subsidiary bodies, in coordination with NMFS, is governed by the MSA and National Standard Guidance, National Environmental Policy Act (NEPA), Regulatory Flexibility Act (RFA), Administrative Procedures Act (APA), as well as other legislation, executive orders, and NMFS policies. The details of the MSA fishery management process are included in NMFS Procedure 01-101-03, *Operational Guidelines for the Magnuson-*

*Stevens Fishery Conservation and Management Act Fishery Management Process.*<sup>1</sup> While the general framework of this process is consistent nationally, there are slight variations in how these guidelines are applied across regions, which are outlined in ROAs.

The purpose of the ROA in this region confirms the mutual interests of the Council, the National Oceanic and Atmospheric Administration's (NOAA) GARFO, the NEFSC, and the Office of Law Enforcement (OLE) in the effective conservation and management of the Northeast Region's fisheries, and clarifies the roles, responsibilities, and commitments of the parties.

The objectives of the ROA are to facilitate the development and implementation of fishery management actions under the MSA: to ensure compliance with applicable law; to help simplify regulations where possible; to help the affected public better understand how fishery management actions are developed, in what timeframe, and how and when to be involved in the process; and to improve the process for developing management actions through more effective collaboration among Council, GARFO, NEFSC, and OLE staff.

The NEFMC is responsible for creating FMPs, the most recent of which were completed in 2002 (red crab) and 2003 (skates). Once created, the Council utilizes three primary types of management actions to carry out the objectives of the plans and make changes: specification setting, framework adjustments, and amendments. Table 1 provides an overview of the number of Council meetings, type of NEPA document, and opportunities for public comment for both frameworks and amendments. For each of these actions, there are several phases: Phase 1 includes planning and scoping, led by the Council staff. Phase 2 includes document development (e.g., environmental assessment [EA], environmental impact statement [EIS], or supplemental information report [SIR]) by both the Council staff and NMFS. Phase 3 includes public review and Council action to recommend final measures. Phase 4 includes preparation by Council staff for transmittal to NMFS as well as secretarial review and implementation, and Phase 5 includes ongoing management.

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<sup>1</sup> <https://www.fisheries.noaa.gov/national/laws-and-policies/fisheries-management-policy-directives>

<b>Table 1. Regulatory Requirements for Management Actions</b>		
	<b>Framework</b>	<b>Amendment</b>
EA	<ul style="list-style-type: none"> <li>• <u>Council time</u>: At least 2 Council meetings (which can include a Committee meeting)</li> <li>• <u>Magnuson</u>: No additional requirements.</li> <li>• <u>NEPA</u>: Agency review following submission.</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Council time</u>: Usually at least 3 Council meetings.</li> <li>• <u>Magnuson (and APA)</u>: At least one public hearing after the draft amendment has been approved; required 60-day comment period on the amendment Notice of Availability [NOA]; 45 day comment period on the proposed rule (overlapped with NOA comment period)</li> <li>• <u>NEPA</u>: Agency review after submission.</li> </ul>
EIS	<ul style="list-style-type: none"> <li>• <u>Council time</u>: At least 2 Council meetings. Council can't take final action until after the 45-day NEPA comment period on the EIS has expired and comments have been considered.</li> <li>• <u>Magnuson</u>: No additional requirements.</li> <li>• <u>NEPA</u>: 45 day public comment period on DEIS; 30 day public comment period on Final EIS (FEIS).</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Council time</u>: At least 3 Council meetings; Council can't take final action until after the 45-day NEPA comment period on the EIS has expired and comments have been considered.</li> <li>• <u>Magnuson</u>: At least one public hearing after the Draft EIS (DEIS) has been approved (overlapped with 45-day DEIS public comment period); 60-day comment period on the amendment NOA; 45-day comment period on proposed rule (overlapped with NOA comment period).</li> <li>• <u>NEPA</u>: 45 day public comment period on DEIS; 30 day public comment period on FEIS.</li> </ul>

For fishery management actions developed under the MSA, NMFS' authority to modify Council recommended FMPs and FMP amendments is restricted: NMFS may only approve, disapprove, or partially approve a proposed FMP or FMP amendment recommended by the Council, and the sole basis for disapproval of any such recommendation is that it is not consistent with applicable law. Following Council approval, NMFS staff are responsible for drafting regulatory text for notice of availability of the proposed rule in the Federal Register, including a comment



period. After reviewing public comment received on the proposed rule, the Regional Administrator (RA) makes a decision regarding approval/disapproval of the action to the Assistant Administrator (AA) for NMFS, and the AA determines whether to concur. Then the final rule is published in the Federal Register with the final measures and the effective date.

#### Regional, National and International Coordination

The NEFMC coordinates with other regulatory bodies in the larger northeast including the Northeast Regional Coordinating Council (NRCC). The NRCC is composed of the Chairs and Executive Directors of the MAFMC and NEFMC, the GARFO RA, the NEFSC Science and Research Director, and the Executive Director of the ASMFC. Among other functions, the NRCC annually reviews lists of proposed priority actions of the Councils and the ASMFC for the coming year, schedules stock assessments, and helps assess and balance the resources (especially staff resources) needed to complete those actions.

Nationally, the NEFMC coordinates with the other regional fishery management councils through the Council Coordination Committee (CCC). The CCC consists of the chairs, vice chairs, and executive directors from each council, or other staff, as appropriate. This committee meets twice each year to discuss issues relevant to all councils, including issues related to the implementation of the MSA.

Internationally, the NEFMC coordinates with Canada through the Transboundary Management Guidance Committee (TMGC) on three shared groundfish stocks on Georges Bank. The Council is a member of the Advisory Committee to the International Commission for the Conservation of Atlantic Tuna (ICAAT) and has a commissioner to the North Atlantic Fisheries Organization (NAFO).