

**Final Prospectus and Terms of Reference
for an Independent Review of the New England Fishery Management Council
2/27/18**

The New England Fishery Management Council (NEFMC, Council) has initiated an independent review to assess its past performance and, more importantly, to identify improvements to its processes in order to successfully address ongoing and future challenges.

Background

- Council's role in fishery management
- Description of the composition of the NEFMC, its fishery management plans (FMPs), and its organization.
- Brief overview of how the Council works with external partners and is subject to various legal mandates and national guidelines.

Scope of the Review

The overall goal of this review is to seek external input on the strengths, weaknesses, and areas of improvement for NEFMC operations in light of the constraints and limitations that exist in the overall system. The review will include an evaluation of:

- Foundations of NEFMC fishery management, including scientific advice, policies, staff support, and access to data.
- Council operating model for designing fisheries management in terms of specification of FMPs, the type and role of subsidiary bodies of the Council, and external coordination with other organizations and various stakeholders.
- Council Performance in terms of processes and outcomes.

The Terms of Reference (ToRs) for the review, described below, indicate in greater detail the scope of the review and the nature of the feedback the Council seeks from the Review Panel.

Operating Environment

Council actions are designed to address the ten National Standards that guide fishery management. Within that framework, there are several broad challenges that receive much of the Council's attention, crossing over many of the Council's management plans. These include: controlling fishing mortality in order to achieve desired biological results; user group interactions for various stocks; fishery dependent and independent data collection; changes in productivity and distribution resulting from climate change; and incorporation of ecosystem principles into management.

The primary biological goal is to prevent (or end) overfishing, defined as exceeding a specified fishing mortality. The Council also is required to rebuild overfished stocks (stocks below a defined biomass threshold). Out of thirty-eight stocks managed by the Council, fourteen stocks are overfished and six are subject to overfishing. Eleven of the fourteen overfished stocks and five of the stocks subject to overfishing are in the Northeast Multispecies FMP. In most instances, overfishing is occurring in spite of catches less than the annual catch limits (ACLs). Multispecies assessments are performing poorly such that catches below the ACLs are not achieving the desired biological objectives. Several theories exist on the reasons for these problems (e.g. changes in survey catchability, mis-specified natural mortality, uncounted removals), but definitive causes and solutions have not been identified. The problem is exacerbated by the belief of many fishermen that the assessments are not accurately estimating stock size.

There are ongoing projects to improve the trawl survey, develop other indicators of abundance (e.g. catch per unit effort [CPUE]/ landings per unit effort [LPUE]), and improve catch monitoring. With the exception of a few instances, biological objectives are routinely met in most other fisheries (skates, Atlantic herring, Atlantic sea scallops, monkfish, small-mesh multispecies, red crab, and spiny dogfish). There is not the same level of criticism of the assessments in these other fisheries.

The Council and NMFS are focusing considerable attention on improvements to fishery dependent and independent data collection. The region uses a two-tier data collection system of vessel logbooks (called vessel trip reports, or VTRs) and dealer reports. Most VTRs are submitted on paper even though there are approved electronic reporting methods. Dealer reports are filed electronically. Discards are estimated from data compiled by at-sea observers. Several projects are underway to expand the scope of electronic reporting by vessel operators and to develop electronic monitoring systems. Fishery independent data is collected primarily by the Northeast Fisheries Science Center (NEFSC) spring and fall bottom trawl surveys. There is little industry confidence in these surveys. Several states also have bottom trawl surveys that are used in assessments but these cover a much smaller area. The NEFSC also has a dedicated scallop survey that is supplemented by an extensive research set-aside program that uses scallop quota to fund surveys conducted on fishing vessels. The NEFSC partnered with the NEFMC and the Mid-Atlantic Fishery Management Council (MAFMC) to form a Northeast Trawl Advisory Panel to explore improvements to the bottom trawl survey and to improve its acceptance by the industry.

Climate change is causing significant impacts across much of the region. The Gulf of Maine is one of the fastest-warming bodies of water in the world. This is leading to changes in fish distribution and fish productivity. While not managed by the Council, the decline in Northern Shrimp is partly attributed to warming temperatures. While yet to be conclusively demonstrated, there are concerns that the increase in temperature may be contributing to the difficulty in rebuilding groundfish stocks such as cod. Some fish species are moving north, complicating management as they move out of the geographic area of one management body into that of another. The NEFSC has an extensive program studying the impacts of climate change on fishery resources and has prepared several reports on vulnerability of stocks and fisheries to climate change. The NEFMC, MAFMC, South Atlantic Fishery Management Council, and Atlantic States Marine Fisheries Commission created an informal group to discuss the management response to shifting distributions.

The Council is working to incorporate ecosystem principles into management. Working with the NEFSC, the Council is developing an example Fishery Ecosystem Plan (FEP). The FEP will explore the scientific basis for the FEP and propose a management approach to effectively consider those principles. This is not an ecosystem approach to management but considers a fundamental change in how New England fisheries would be managed. The FEP will not be unduly constrained by existing legal or policy guidance so that necessary changes in either can be identified. The FEP will be developed over the next two years, at which point the Council will determine whether it will pursue implementation.

Finally, there are frequent conflicts between user groups for different stocks. These take a variety of forms. There are conflicts between near-shore and offshore fishermen over access to near-shore resources, such as a dispute over scallops in the Gulf of Maine. There are disputes over access to forage species between Atlantic herring fishermen and other fishermen who rely on herring to attract their target species. Some managed species are caught in several different fisheries, leading to allocations between those fisheries and requirements for fishery-specific accountability measures. For example, the scallop fishery has a bycatch of several groundfish stocks that have small ACLs, leading to the possibility that the high-value scallop fishery can be constrained by catches of these low-value stocks. Finally, there is increasing concern that offshore energy development (both wind power and offshore oil drilling) will compete with fisheries for access and may harm fishery resources.

Terms of Reference

The Terms of Reference 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. In this context, how well is the NEFMC doing, and more importantly, how can it do better.

These TORs were slightly revised and approved by the Council 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., MSA 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?
 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?

Biographies for members of the review panel are available on the Council's Program Review Website: <https://www.nefmc.org/library/council-program-review>

Contract Support

The Council has enlisted the help of two contractors to support this process as follows:

- **Fisheries Leadership & Sustainability Forum** – The [Fisheries Forum](#) will gather input from fishery managers and stakeholders throughout the greater New England region via 14 port meetings, one webinar meeting, an online survey, and one-on-one interviews. The resulting feedback will be provided to the review panel.
- **Tidal Bay Consulting** – [Tidal Bay](#) will compile reference documents for the review panel, plan and provide support for the review meeting itself, and prepare the panel's final report in coordination with the review panel.

Design of the Review

- In-person public meeting of 4 days, including:
 - Presentations and panel discussions on the ToRs.
 - Presentations and discussions on stakeholder input
 - Opportunities for stakeholder questions and comments
 - Public panel deliberations to develop recommendations
 - Executive sessions for panel deliberations and developing the draft report
- Background documents will be available online prior to the meeting.

- This review provides multiple opportunities for stakeholder comments:
 - Online survey (also available in print)
 - Public port meetings (14 meetings were held between Nov. 2017 – Jan. 2018)
 - An online webinar
 - Interviews with over 70 scientists, managers, and industry, including NOAA staff, Council staff, Council members, and members of the SSC, PDTs, and APs.
 - During the Program Review meeting

- Final report preparation by correspondence

- Council response to the report including an action plan