



**Mid-Atlantic Fishery Management Council**

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

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August 15, 2022

Mr. Roger Griffis  
NMFS/Office of Science and Technology  
1315 East-West Highway  
Silver Spring, MD 20910

Dear Mr. Griffis:

Please accept the attached comments from the Mid-Atlantic Fishery Management Council on the Draft Northeast Regional Climate Action Plan (NERAP) for 2022-2024. These comments reflect the discussion and feedback from Council's Scientific and Statistical Committee during their July 2022 meeting, as well as input provided by Council staff.

Thank you for the opportunity to review the draft NERAP. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "C. Moore".

Dr. Christopher Moore, Executive Director  
Mid-Atlantic Fishery Management Council

Enclosure: MAFMC Comments on Draft Northeast Regional Climate Action Plan (NERAP)

## **MAFMC Comments on the Draft Northeast Regional Action Plan (NERAP) – Climate Science Strategy in 2022-2024**

### **General Comments**

- The draft NERAP demonstrates the significant amount of scientific investment and progress made since the release of the 2016 plan.
- We appreciate that the updated plan includes a greater focus on developing approaches to ensure that ecosystem and climate information can provide both tactical and strategic science and management advice.
- Fisheries management will benefit from the continued work and development of more advanced forecast/predictive stock distribution models that incorporate potential drivers of distribution shifts and implications for stock productivity. If possible, we recommend including a greater focus and attention on short-term (1-10 years) forecast models that operate at the general scale of management decisions and considerations.
- Though we recognize that recent trends dominate the focus of new research, we note that it is imperative that historical datasets also be maintained and utilized in future research and analysis.

### **1.0 Executive Summary**

- Fourth paragraph, lines 35-36 – “These needs include: 1) maintaining and enhancing surveys and data collection;...”
  - We recommend adding “adapting” to this need (“maintaining, enhancing, and adapting...”). The region’s surveys and data collection efforts need to be adaptable to changing ocean conditions as well as offshore wind development and other activities that may impact timing, catchability, and survey design. Additional comments and rationale are provided under Section 4.0.

### **2.0 NERAP Accomplishments (FY16-FY21)**

- Lines 112-114 – mentions tracking progress of NERAP through the number of publications relative to the objectives.
  - Are there other metrics that could be included, particularly where/how meeting these objectives have been applied and used within the management process and decision making?

### **2.1 Maintaining Infrastructure**

- Second paragraph, lines 146-157 – discussing collaborative work with Canada’s DFO.
  - It might be worth mentioning the collaboration and ecosystem/climate work being done as part of the ICES Working Group on the Northwest Atlantic Regional Sea given their active role, development of a variety of climate/ecosystem products, and engagement of management (i.e., the councils).

### **2.2 Tracking and projecting change, understanding mechanisms**

- First paragraph, line 220 – reference to Table 1
  - Table 1 appears to be missing.

### **3.0 Key Needs (FY22-FY24)**

#### **3.1 Maintaining Infrastructure**

- Fourth paragraph, lines 422-425 – mentions opportunities for increased collaboration with different partners.
  - This is the first and only mention of collaboration with the Southeast Fisheries Science Center and does not offer any specifics. Continued and increased collaboration, partnerships, and communication with the SEFSC on survey overlap/linkages, survey design considerations, and sharing of survey results and information throughout the region will be critical as species from the South Atlantic expand into the Mid-Atlantic and new/emerging fisheries occur.

#### **3.3 Informing Management**

- First paragraph, lines 533-535 – discussing the management system and partners in the northeast.
  - We recommend that you add, as part of this system, the 12 individual coastal states within the northeast region. They are part of the ASMFC and Council process, but each state individually plays a critical role in the science and management process. This adds to the complexity and challenges, but also creates opportunities for potential solutions and areas of engagement. Additional consideration for state survey information and their use in stock assessments could also be included (applies to this section and/or section 3.1 on collaboration).

### **4.0 Action Plan (FY22-FY24) / 4.1 Descriptions of NERAP Priority Actions**

#### **NERAP Priority Action 1 - Surveys**

- *Comments on NERAP Priority Actions 1-3:*
  - As mentioned under the Executive Summary comments, not only should the existing survey and data collection programs be maintained, but they should also have adaptive capacity. Climate change will continue to impact stock distributions and the timing and availability of some species to survey gear. Competing ocean uses such as offshore wind may also impact survey timing, locations, and methods. Therefore, it is more critical than ever that the surveys collect the most appropriate and representative information. New/different gear types, survey design, timing, survey platforms may all need to be adjusted and planning for these potential changes is critical.
    - Related to this is increased collaboration and communication with the SEFSC regarding data collection efforts. The science centers should seek opportunities to improve, modify, and adapt surveys along the entire Atlantic coast to ensure we are appropriately capturing changes in stock distribution and the potential environmental drivers of these changes.
  - Although this section primarily focuses on surveys and fishery-independent data collection efforts, there is opportunity and need to maintain and enhance fishery-dependent data collection programs as well. Data collection through the observer program, port sampling, and the study fleet are critical for stock assessments and management and can play an important role in advancing the NERAP. Considerations for how to engage and collect relevant fishery and ecosystem information from the recreational sector, particularly the for-hire fleet, should also be considered.

- Development and increased use of technology such as HABCAM, EM, AI, optical surveys, and electronic reporting systems may provide opportunities to address survey data collection shortfalls, streamline and increase efficiencies, and collect new/different information.
- Attention should also be given to improved sampling strategies that result in improved precision.

### **NERAP Priority Action 3 - Industry collaboration**

- We recommend considering greater and expanded use of vessel monitoring system (VMS) information for spatially and temporal harvest data to help understand fishing behavior.
- The continued support for cooperative research on fishery dependent platforms is also critical to help support the development of high-resolution modelling efforts (Priority Action #6).

### **NERAP Priority Action 6 - Hindcasts, forecasts, projections**

- Although a lot of progress has been made in developing high resolution models as part of this priority action, there remains a need for high resolution temporal data (e.g., for phenology comparisons across years). Information from fixed buoys and possible collaborations with wind energy installations could help address some of these finer scale temporal data needs.
- Improvements to short-term forecasts of environmental data will help reduce uncertainty and improve both stock assessment and management outcomes. In addition, these environmental forecast models should be developed for a broad range of species and life histories.

### **NERAP Priority Action 7 - Spatial management**

- We strongly support this priority and the continued development of spatial modeling efforts (linked to Priority Action #10). This type of modeling is critically important, particularly in a changing environment.
- Consider combining VAST with WHAM to take advantage of state-space methodologies.

### **NERAP Priority Action 8 - Scenario and management planning**

- Line 1061 in the third paragraph – should be the Northeast Regional Coordinating Council (replace “Committee” with “Council”).
- This section should include additional discussion and focus on the development and potential use of Ecosystem and Socioeconomic Profiles (ESP). For example, it may be useful to reference the development of ESPs for Black Sea Bass and Bluefish as part of the research track process. There is some discussion of these reports (e.g., a future workshop is mentioned), but these efforts have the potential to advance both the science (through stock assessments) and management uptake of ecosystem/climate information given their stock-specific/complex applications.