

# Northeast Regional Action Plan (NERAP) – Climate Science Strategy in 2022-2024

## *Staff Comments*

July 2022

### **General Comment(s)**

- Draft report demonstrates the amount of scientific investment and progress made since the 2016 plan.
- Appreciate a focus and more concerted effort to develop approaches to help ensure ecosystem/climate information can provide both tactical and strategic science and management advice.
- Support the continued work and development of forecast/predictive stock distribution models that include more than temperature change considerations and the potential drivers of distribution shifts and the implications for stock productivity. If possible, include a greater focus and attention on short-term (1-10 years) forecast models that operate at the general scale of management decisions and considerations.

### **Section 1.0 Executive Summary**

- Fourth paragraph, lines 35-36 – “These needs include: 1) maintaining and enhancing surveys and data collection;...”
  - Recommend adding “adapting” to this need. The regions surveys and data collection efforts not only need to be maintained and enhanced but they also need to be adaptable to changing conditions and needs given climate impacts or other offshore uses (e.g., wind) that may impact timing, catchability, and survey design. Additional comments and rationale are provided under Section 4.0

### **Section 2.0 NERAP Accomplishments**

- Lines 112-114 – mentions tracking progress of NERAP through the number of publications relative to the objectives.
  - Comment – 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?

### **Section 2.1 Maintaining Infrastructure**

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

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

- First paragraph, line 220 – reference to Table 1
  - Don’t see a Table 1 in the document

### **Section 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 move into the Mid-Atlantic and as new/emerging fisheries occur.

### **Section 3.3 Informing Management**

- First paragraph, lines 533-535 – discussing the management system and partners in the northeast.
  - Would also add as part of this system the 11 individual states within the northeast region. They are part of the ASMFC and council process, but each individually play a critical role within the science and management process in the region. This adds to the complexity and challenges, but also potential solutions and areas of engagement. Additional consideration for state survey information and their use in stock assessments could be included (applies to this section and/or section 3.1 on collaboration).

### **Section 4.0/4.1 – Maintaining Infrastructure**

#### *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 be adaptable. As climate change continues to impact stock distributions and the timing and availability of species to a survey gear and as ocean planning challenges (e.g., offshore wind) continue to impact how/where/when a survey may occur and the data that is collected, ensuring the surveys we do have are collecting the most appropriate and representative information is critical. This is particularly true given the declining trend in survey samples collected annually. 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 ensuring the continued, or increased, collaboration and communication with the SEFSC data collection efforts. Where are there 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.
- This section primarily focuses on surveys and fishery-independent data collection efforts, but there is opportunity and need to maintain or enhance the fishery dependent data collection programs as well and are facing many of the same challenges. Data collection efforts 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.

- What about opportunities and advantages associated with the use electronic technologies and reporting? Development and increased use of technology such as HABCAM, EM, AI, optical surveys, electronic reporting systems may provide for opportunities to address survey data collection shortfalls, streamline and increase efficiencies, and collect new/different information.

#### **Section 4.1 – Informing Management**

##### *NERAP Priority Action 8*

- Third paragraph, line 1061 – should be the Northeast Regional Coordinating Council (NRCC). Replace “Committee” with “Council”.
- Additional discussion and focus on the development and potential use of Ecosystem and Socioeconomic Profiles (ESP) should be considered and included in this section. For example, referencing the development of ESPs for Black Sea Bass and Bluefish and potential lessons learned as part of the research track process could be included. There is some discussion of these reports (e.g., a future workshop is mentioned), but these efforts have the potential to really advance both the science (through stock assessments) and management uptake of ecosystem/climate information given their stock-specific/complex application.