



## New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
 John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

### MEMORANDUM

**DATE:** May 21, 2019  
**TO:** Herring Committee  
**FROM:** Herring Plan Development Team  
**SUBJECT:** **Debrief of Amendment 8 Management Strategy Evaluation process**

The Council set as a work priority for 2019 a “workshop to solicit feedback on Management Strategy Evaluation (MSE) process” used to develop and analyze Acceptable Biological Catch (ABC) control rule alternatives in Amendment 8 to the Atlantic Herring Fishery Management Plan.<sup>1</sup> To keep this priority on-track, the Herring Committee should bring to the June 2019 Council meeting a recommended work plan for Council consideration. The Herring Plan Development Team (PDT) provides the following input on this priority.

#### ***PDT RECOMMENDATION***

Rather than convene a workshop, the PDT recommends use of an online survey potentially supplemented with targeted interviews to solicit feedback on the MSE process used in Amendment 8.

#### ***INTRODUCTION***

This priority originated from a Herring PDT recommendation in September 2018, that the Council “host [a] third MSE workshop or other opportunity to solicit feedback on [the] herring MSE process (possibly second half of 2019 when Amendment 8 is effective and final action on specs is complete).” This MSE was the first time the Council used MSE as a decision-making tool, and the degree of stakeholder participation was rare, if not unique, at least for U.S. fisheries (Feeney et al., 2018). The PDT still recommends taking a step back to identify the benefits or drawbacks of this evaluation tool, as well as specific lessons learned. The PDT cautions that it would be short-sighted to decide whether to conduct another MSE based solely on how this first attempt at MSE went. The PDT is aware of many potential improvements that could be made to the MSE process used for Atlantic herring, cautioning against judging the entire value of MSE generally on this single experience.

---

<sup>1</sup> An MSE involves simulation testing of how various management approaches, ABC control rules in this case, may perform relative to various objectives and relevant uncertainties.

The PDT assumes that the Council’s intent of a “workshop to solicit feedback” was to gather public input as part of a debrief that would inform future decisions on using MSE to manage Atlantic herring or as a potential tool for future Council management actions. The PDT has reconsidered the idea of convening a public workshop to solicit input on the MSE process and now recommends using an online survey, potentially supplemented with interviews if time and resources allow. Planning a successful workshop requires substantial time and human resources, and public input would be limited by who could attend on the day of the event. A survey would likely provide more detailed input from people who were involved in the MSE and interested in the future of herring management. A survey may also be a more convenient and efficient way to collect input from those who may not be able to attend an in-person workshop.

***PROPOSED PURPOSE AND GOALS OF THE DEBRIEF***

The PDT recommends that the purpose of the debrief be to evaluate the process used to integrate MSE into Amendment 8 to the Herring FMP to inform future decisions on using MSE to manage Atlantic herring or for other purposes.

The PDT recommends that the goals of the debrief be to:

- Identify perceptions of the MSE process,
- Identify pros and cons of the specific process used,
- Identify lessons learned from the process, and to
- Inform future Council decisions on use of MSE for Atlantic herring management.

***PROPOSED WORK PLAN***

The PDT recommends proceeding with the debrief as outlined in Table 1, with the goal of bringing a final report to the December 2019 Council meeting. Over the summer, the survey would be conducted to gather perceptions from the public and Council members about MSE process. If time allows, the PDT may conduct interviews with a range of stakeholders to provide more detailed input. It should be noted that there are several herring actions under development, and if necessary, this item may stretch into 2020 if staff resources are needed for other purposes.

**Table 1 - Proposed phases and timeline of the Atlantic herring MSE debrief**

| <b>Phases of debrief</b> | <b>Purpose and/or steps</b>   | <b>Timeline (2019)</b> |
|--------------------------|---|------------------------|
| Planning                 | PDT and Committee develop purpose, goals, workplan and survey questions (with AP input).                            | April-May              |
|                          | Council approves the purpose, goals and work plan.  | June                   |
| Gathering feedback       | PDT finalizes survey questions.   | June-July              |
|                          | PDT administers survey.   | July-August            |
|                          | PDT potentially conducts follow-up interviews (perhaps 10).   | August-September       |
| Reporting                | PDT drafts report, compiling survey (and potential interview) outcomes and providing PDT input and recommendations. | September-October      |
|                          | AP and Committee review draft report and provide input and recommendations.   | November               |
|                          | Council receives final report and Committee recommendations.  | December*              |

\*If there are any delays or more time is needed, this could slide to Jan 2020 Council meeting.

### ***POTENTIAL SCOPE FOR INPUT***

To give a sense of the potential scope of this debrief, the bullets below identify a possible range of questions that could be explored. The PDT recommends keeping the survey questions brief.

1. Was the purpose and need clear for using MSE in Herring Amendment 8?
2. Was there enough education about MSE generally? If not:
  - a. What aspects were most difficult for you to understand?
  - b. How could the education process have been improved (e.g., more literature provided, online instructional webinars, in-person seminars)?
3. Was it appropriate to use open-invitation, public workshops in conducting this MSE? If not, what other formats would you recommend and why?
4. Were the MSE results presented useful? Did the presentation of results help characterize the tradeoffs associated with various alternatives?
5. Were the MSE results and workshop input used sufficiently by the Council in the alternative development phase of Amendment 8? If not, do you have specific suggestions for how MSE results could have been integrated better in the development of ABC control rule alternatives in Amendment 8?
6. Was the MSE helpful in balancing tradeoffs between objectives?
7. What was the most/least valuable aspect of this MSE?
8. What were the benefits, if any, in using an MSE for Amendment 8? In the end, did the benefits outweigh any costs?
9. How did this MSE process compare to how else the Council could have developed and selected alternatives?
10. What other comments about this MSE do you have?

### ***POTENTIAL RESOURCES***

There is a growing literature about MSE best practices. In developing its recommendations, the PDT may draw on such resources as the special issue on MSE published by the *Canadian Journal of Fisheries and Aquatic Sciences*, which includes two articles on the Atlantic herring MSE (Deroba et al., 2018; Feeney et al., 2018). The International Council for the Exploration of the Seas recently conducted an MSE best practices workshop, and a final report is forthcoming. If time permits, this debrief may include more widespread lessons learned along with the specific input collected in this debrief.

Participants in the herring MSE workshops were surveyed after each workshop, the results of which have already been reported to the Council and included several recommendations for future improvements. However, these results should be considered again during the proposed debrief.

### ***REFERENCES***

- Deroba, J. J., Gaichas, S. K., Lee, M.-Y., Feeney, R. G., Boelke, D. V., & Irwin, B. J. (2018). The dream and the reality: meeting decision-making time frames while incorporating ecosystem and economic models into management strategy evaluation. *Canadian Journal of Fisheries and Aquatic Sciences*. doi:10.1139/cjfas-2018-0128
- Feeney, R. G., Boelke, D. V., Deroba, J. J., Gaichas, S. K., Irwin, B. J., & Lee, M.-Y. (2018). Integrating management strategy evaluation into fisheries management process: advancing best practices for stakeholder inclusion based on an MSE for Northeast U.S. Atlantic herring. *Canadian Journal of Fisheries and Aquatic Sciences*. doi:10.1139/cjfas-2018-0125