



New England Fishery Management Council

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John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

MEETING SUMMARY

Ecosystem Based Fishery Management (EBFM) Committee

Via Conference Call
September 8, 2020

The EBFM Committee held a remote webinar meeting on September 8, 2020, beginning at 9:35 am. The meeting ended at approximately 2:50 pm.

This meeting focused on four issues:

- New public outreach workshop materials being developed by [Green Fin Studio](#) focusing on EBFM for the Georges Bank Ecosystem Production Unit,
- Three demonstration tools as a Tangible Worked Example of the concepts in the [example Fishery Ecosystem Plan for Georges Bank](#) (eFEP),
- A draft format for Public Outreach Workshops, and
- An initial list of management priorities for 2021.

Presentations and background documents are available on the Council's EBFM [web page](#).

MEETING ATTENDANCE:

Committee: John Pappalardo (Chairman), Dr. Matthew McKenzie (Vice-chair), Mr. Richard Bellavance, Mr. Eric Reid, Ms. Allison Ferreira (GARFO), Mr. Peter Aarrestad, Dr. Michael Sissenwine, Mr. Michelle Duval (MAFMC), Kate Wilke (MAFMC), and Melissa Smith (ME designee).

Plan Development Team (PDT): Andrew Applegate (NEFMC staff, PDT chair), Emily Keiley, Sharon Benjamin, and Dr. David Stevenson (GARFO), and Dr. Michael Fogarty (NEFSC).

[GreenFinStudio](#) (GFS) David Jasinski

Council and NEFSC staff: Mitch McDonald (GCNE), Andy Beet, and Corey Morgan, Janice Plante, Michelle Bachman, Chris Kellogg, and Sam Ascii (NEFMC staff)

Public: George LaPointe (Fishery Survival Fund), Chris McGuire and Carl LoBue (The Nature Conservancy), Andrea Bogomoini, James Fletcher (United Fishermen), Megan Ware (ME DMR), Kelly Whitmore (MA DMF), Alissa Wilson (NJ DEP), Percie Bennett-Nickerson, Jeff

Kaelin (Lundfish), Yunzhou Li, Drew Minkiewicz, Stephanie Sykes, Mary Beth Tooley, Eugene Bergson, and John Duane.

KEY OUTCOMES:

- The committee reviewed and provided feedback on the new documents presented by GFS.
- The committee received a document describing the Hydra Worked Example with new scenarios to demonstrate the eFEP concepts, a demonstration of the Kraken Visualization Tool that demonstrates the effects of biological interactions for four stock complexes, and an eFEP catch determination tool that compares single species and stock complex approaches.
- The committee approved recommended the public outreach materials presented by GFS and the worked example tools presented by the PDT as a foundation for the basis of future outreach workshops.
- Mr. Applegate outlined a general timeline and strategy for public outreach workshops to be held at the end of 2020 and into 2021.
- The committee generally felt that the initial list of 2021 management priorities accurately reflected the next steps that included conducting the EBFM Public Outreach Workshops, presenting workshop summaries to the Council in the first half and beginning a more formal Management Strategy Evaluation process in the second half.

Motions:

1. Dr. McKenzie/Alison Ferreira: Moved to recommend that the Council adopt the current EBFM materials (as modified) as a foundation for the basis for future outreach workshops.

Committee passed motion by consensus.

Introduction

Mr. Pappalardo summarized the purpose of the meeting, the agenda and began the first agenda item with a presentation by GFS. During the meeting, the committee was expected to:

- Approve and/or provide feedback to [Green Fin Studio \(GFS\)](#) and Council staff on draft presentation and other outreach material.
- Approve and/or provide additional guidance as needed on the PDT's work to develop Tangible Worked Examples.
- Approve proposed plan and/or provide guidance to staff on a public outreach workshop framework.
- Discuss and develop recommendations for 2021 management priorities

AGENDA ITEM 1– DRAFT OUTREACH MATERIALS DEVELOPED BY GREEN FIN STUDIO (GFS)

Presentation

Mr. Jasinski of GFS presented the draft outreach material that it had developed for the Council since the last EBFM Committee meeting on July 21, when they presented the EBFM committee with presentations focusing on a deeper dive into [EBFM and its potential application](#), a summary of the [catch ceiling and floor framework in the eFEP \(example Fishery Ecosystem Plan\)](#), and on [EBFM science](#). The new materials presented at this meeting included a final version of a [2nd Infographic](#), three stakeholder brochures ([1](#), [2](#), [3](#)), a [Fishery Ecosystem Plan glossary](#), a rough draft “[Guide to the example Fishery Ecosystem Plan](#)”, and gave a short preview of a 5-minute introductory video.

Mr. Jasinski said that the Guide to the eFEP brochure text would be reviewed by the EBFM Plan Development Team (PDT) and Council staff for accuracy and omissions, but it was expected to be ready for the September Council meeting. GFS is currently conducting interviews for the video via GoToMeeting or Zoom due to the current difficulties associated with travel and meetings. He said that background footage, or B-roll, had been obtained and shot by a videographer in New Bedford and Plymouth with the assistance of Mr. Applegate.

Discussion

The committee thought that the new materials presented by GFS were very good and offered a few comments for cleaning up final versions to be presented to the Council. Questions were asked about why there were three versions of brochures targeting different stakeholder groups. The three stakeholder brochures were developed to address different concerns and benefits that stakeholder groups had during the interviews conducted in May and June. Some of these concerns and benefits overlapped. A question was asked about why the stock complex distributions did not include the Nantucket Shoals. Data were derived from spring survey data on the NE Data Portal and the NMFS survey does not cover the Nantucket Shoals due to depth considerations. The committee recommended adding that note to the brochure. A committee member pointed out that cod was listed as a bycatch species in the stock complex by gear table and recommended that it be changed to a target species.

The committee discussed the note at the end of page which said, “It is not the intent to disrupt or further limit existing fishery access to fish stocks on Georges Bank. We want to make the resources more productive and sustainable, while reducing bycatch and regulatory cost.” Mr. Applegate said that it was included to point out that an FEP was not intended to change limited access per se. Dr. Sissenwine thought that the existing statement would be misleading because the allowable catch amounts and allocation will change. He pointed out that people perceive that catches will be lower because the sum of the single stock MSYs are more than the MSYs for the ecosystem. GFS and Mr. Applegate agreed to revisit the issue and develop a more accurate statement. Another committee member suggested combining the infographic with the glossary to prevent the create of a blank page, the infographic being a 4-page document and that calling it a fact sheet rather than an infographic would be more accurate.

The glossary was written to be consistent with language used in the eFEP and for EBFM, but in some cases have subtle differences with official MSA definitions. The committee recommended changing the title of the glossary brochure so that it was consistent with its intended use and application.

Some members questioned the placement of the labels in the stakeholder group Venn diagrams in the stakeholder brochures, which were written to reflect the concerns and benefits that were discussed by stakeholders. Some members and some attendees disagreed with some of the placements, but no specific recommendations on what to change were made. It was recognized that there are overlapping concerns and benefits among stakeholder groups, so it could be relabeled to indicate that these are primary concerns and benefits from stakeholder interviews.

Mr. Minkiewicz felt that the concerns and benefits of the NGOs and public should be separate parts, because in some ways he felt that they do not overlap. He thought that the brochures were misleading and send the wrong message. He also suggested some clarification in the definition of filter feeders to include filter feeding on mesoplankton, including larvae and juvenile fish. Mr. LaPointe felt that some of the text in the brochure was not necessarily an evident outcome, for example it isn't yet clear how yellowtail flounder as a choke stock on Georges Bank would be addressed. And under data collection and monitoring, he thought that many of the issues are being addressed now, and the eFEP focused on monitoring environmental factors that are specifically related to EBFM. The committee thought that getting and validating information from fishermen should be discussed as part of the benefits.

Mr. Applegate said that GFS and he had assembled quite a bit of B-roll material for the video that GFS was developing, but we lacked at-sea onboard video due to the current virus travel and social distancing restrictions. He asked that if people knew of any such video available to let him know.

The committee thought the way that the text for the Guide to the eFEP does a good job describing the document, but various people will look at it in different ways. The committee thought that the worked example demonstrations would be helpful for people to work through the material. They suggested that the Guide make reference to the tangible worked examples. Mr. Applegate mentioned that a fourth presentation to be developed would include an introduction and summary of the tangible worked example tools.

The committee discussed the use of 'optimize' for most of the goals listed in the Guide to the eFEP brochure draft material, that it really was not that informative about what the Council is trying to achieve. Mr. Applegate pointed out that the committee had discussed this issue before and had accepted the current list to start the EBFM effort off, because you cannot maximize achieving every goal. There will be tradeoffs and choices that stakeholders and managers will need to make. He added that identifying and prioritizing objectives is an important step for the Management Strategy Evaluation. Mr. Jasinski suggested adding some discussion about what optimization means and how tradeoffs might be evaluated. The radar plots at the end of the Hydra document was mentioned as a way to explain the balance or methods to evaluate tradeoffs.

Mr. Fletcher asked about where in EBFM is total utilization of all catch considered. He thought it should be part of the EBFM program¹. Mr. Applegate reminded the committee that this issue had been discussed previously and there were many uncertain issues, that it wasn't clear how maximum retention would contribute to ecosystem productivity.

Dr. Sissenwine thought that the materials suggest that the proposal is much more complex, but the worked example based on Hydra is actually simpler, with fewer ACLs and more stability in regulations. He commented that this message is obscured because every dimension of an ecosystem issue is discussed in the eFEP, essentially creating a mismatch between the comprehensive nature of the descriptions in the eFEP and the basic application of Hydra, which is based on an effort-based management scheme. It seems complex, but what is being proposed by the worked example is relatively simple, added Dr. Sissenwine. Dr. Fogarty explained that the underlying control in the Hydra model functions by modulating effort by fishery type – the catches are an outcome of the effort and catchability by fleet. Mr. Applegate pointed out that the catch management framework relies on a catch-based harvest control rule based on the biomass floors and catch ceiling concept.

AGENDA ITEM 2 –TANGIBLE WORKED EXAMPLE TOOLS

Presentation

The Plan Development Team (PDT) chair also presented three demonstration tools as a Tangible Worked Example of the concepts in the eFEP. The PDT chair gave a live view of the eFEP Catch Framework demo, the Kraken Visualizaiton Tool, and Dr. Fogarty walked the committee through a revised document that describes the Hydra Operating model and four example scenarios. The results relative to eight performance metrics for the four scenarios at different exploitation rates ranging from 0.05 to 0.4 were presented as a set of 'radar' plots.

Discussion

The committee thought that the tools and presentations were good, but they seemed to be interested in making the models run with a consistent interface and time series length. One simulation runs for 50 years and then does multiyear projections, another has a simulation and a 30-year projection, and another has a 50-year time series and a 1-year projection. Doing this might make the interactive demonstrations more accessible to people if they don't have to learn different interfaces. Mr. Applegate replied that the tools demonstrate different concepts and are written in different code. We intend on a central site to link to these tools, but there we cannot rewrite the code at this time. Mr. LaPoint thought that an intermediate step is needed to teach people how to tinker with it. Mr. Applegate replied that the set of tools can be part of one or more of the proposed workshop modules.

¹ NB Maximum retention is discussed in the eFEP section on incentive based measures, something that had been communicated with Mr. Fletcher before the meeting.

Mr. Minkiewicz commented that the materials provide an illustration of how EBFM could be applied, but did not portray a real world example that people could understand. He did not think that it would be received well. He thought that people would be frustrated by it.

Motion:

1. Dr. McKenzie/Alison Ferreira Moved to recommend that the Council adopt the current EBFM materials (as modified) as a foundation for the basis for future outreach workshops.

Committee passed motion by consensus.

Discussion of the motion

Dr. McKenzie thought it is appropriate for the Council to see and weigh in on the considerable amount of material that has been developed. Eric Reid wanted to be clear about what the models can and cannot do and the committee's recommended modifications to the outreach materials are addressed. Mrs. Smith wanted to be sure that there would be additional opportunity for comments and potential edits after the meeting.

AGENDA ITEM 3 – DRAFT PUBLIC OUTREACH WORKSHOP FORMAT

Presentation

Council staff presented a draft format for Public Outreach Workshops and asked for guidance and input from the Committee. Mr. Applegate presented the format that he had first proposed at the last EBFM Committee meeting. Following that meeting, he had sent the format outline to the MSE Steering and EBFM Committees, but had received few comments or recommendations. The only thing that changed was thinking about having more than one opportunity for people to participate in a module in case they were not available when a specific workshop was held.

Discussion

The committee thought that the Council should record the webinars so that they could be replayed after the webinar by anyone that was interested. No other suggestions were made.

AGENDA ITEM 4 – OTHER BUSINESS: PRIORITIES

Presentation

The Committee reviewed an initial list of management priorities developed by staff. The Council will take up 2021 management priorities at its September meeting, followed by a special late October meeting where final MSE management priorities for 2021 will be approved. Mr. Applegate suggested that the MSE Steering Committee could be brought back in to provide guidance following the public outreach workshops. A third priority included staff work on related EBFM work for the State of the Ecosystem report and for liaison with other EBFM groups.

Discussion

The committee agreed that the priorities represented the intended path forward with public outreach workshops followed by starting the Management Strategy Evaluation process in mid-2021.