



New England Fishery Management Council

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DRAFT MEETING SUMMARY

Ecosystem Based Fishery Management (EBFM) Committee and EBFM Plan Development Team (PDT)

Via Conference Call

March 31, 2020

The EBFM Committee and PDT held a joint remote meeting on March 31, 2020. Two topics on the agenda were a report and discussion on public outreach materials for future EBFM workshops and on the qualities and characteristics of a more tangible worked example, one that demonstrates the core principles in the [example Fishery Ecosystem Plan for Georges Bank](#) (eFEP).

MEETING ATTENDANCE:

Committee: John Pappalardo (Chairman), Dr. Matthew McKenzie (Vice-chair), Mr. Richard Bellavance, Mr. Eric Reid, Mr. Michael Ruccio (GARFO), Mr. Peter Aarrestad, Dr. Michael Sissenwine, Mr. Warren Elliott (MAFMC), Kate Wilke (MAFMC), Marianne Ferguson, Megan Ware. **Council:** Dr. John Quinn and Libby Etrie

PDT: Andrew Applegate (NEFMC staff, PDT chair), Dr. Geret DePiper, Dr. Gavin Fay, Dr. Michael Fogarty, Dr. Rich Bell, Dr. Wendy Morrison, Ms. Emily Keiley, Dr. Peter Auster, Dr. Sean Lucey, Brandon Mufflet, Melissa Smaith, and David Stevenson.

[GreenFinStudio](#) and **[Eating with the Ecosystem](#)**: Paula and David Jasinski, and Kate Masury

Council and NEFSC staff: Andy Beet and Scott Large (NEFSC), Lou Goodreau, Janice Plante, Joan O’Leary, and Woneta Cloutier

Public: George LaPointe (Fishery Survival Fund), Jocelyn Runnebaum and Chris McGuire (The Nature Conservancy), James Fletcher, Erica Fuller (Conservation Law Foundation), Robert LaFrance (Audobon), Katie Almeida (Town Dock), Andrea Bogomoini, Jeff Kaelin (Lundsfish), and Jim O’Leary

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

KEY OUTCOMES:

- GreenFinStudio (GFS) presented a list of proposed stakeholder profiles and a timeline for public outreach deliverables. Feedback was given by the Committee and PDT particularly on the list of stakeholders and an example stakeholder profile. GFS will begin work shortly by contacting some members of stakeholder groups to conduct interviews and develop draft profiles. Development of a video deliverable could be hampered by the COVID shutdowns, because they could require face to face interviews. GFS is expected to complete and present draft stakeholder profiles as well as initial draft infographics for the next EBFM committee meeting, but initial draft material may also be reviewed by email coordinated by Mr. Applegate.
- The Committee and PDT discussed differing and common viewpoints about the existing worked example materials, including the framework described in the eFEP document and in the September 2018 peer reviewed worked example. Dr. Fay presented a preliminary approach to demonstrate assessment and determination of catch limits, comparing a single species approach to an EBFM stock complex ceiling/floor approach that is described in the eFEP. A potential interactive method using the R Shiny App was discussed, which would allow stakeholders to investigate various conditions and approaches. Feedback and guidance was provided to Dr. Fay and the PDT.

Motions: The Committee made no motions during the meeting.

Introduction

Mr. Applegate began the meeting with a brief introduction to the remote meeting software and to the meeting protocol that would be followed. Mr. Pappalardo outlined the agenda and began the first agenda item with a presentation by GFS.

AGENDA ITEM 1– DEVELOPMENT OF PUBLIC OUTREACH MATERIALS

Presentation

The [GFS presentation](#) gave a timeline summary of deliverables in the Council’s contract Statement of Work. The intention is to present nearly all of the deliverables at the June Council meeting, with several opportunities for presentation and feedback by the Committee and PDT as draft material becomes available. GFS discussed with the committee a list of proposed stakeholder groups that would help guide and tailor the deliverables to target the stakeholder groups. A couple of stakeholder profiles were presented to give the meeting participants an idea of what a stakeholder profile would look like.

Discussion

The Committee and PDT provided feedback. Some felt that the three commercial fishermen stakeholder groups should be expanded to represent a greater diversity of fishermen that fish on Georges Bank. Some suggestions were also made about additional representatives that were on

the list who could be contacted and interviewed. GFS intention is not to contact all of them, but use the list to select some for interviews to develop stakeholder profiles. The point is to capture a range of stakeholders with vested interested in the outcome, with a short description of their motivations and views on EBFM.

AGENDA ITEM 2 – DEVELOPMENT OF A TANGIBLE WORKED EXAMPLE

Presentation

Mr. Applegate referred to a [summary of comments](#) received to four relevant questions on a potential tangible worked example. Two responses were received from Committee members and six responses from PDT members. Mr. Pappalardo and Mr. Applegate stepped through the questions for discussion.

Dr. Fay presented a preliminary approach to demonstrate assessment and determination of quota advice, comparing a single species approach to an EBFM stock complex ceiling/floor approach that is described in the eFEP. A potential interactive method using the R Shiny App was discussed, which would allow stakeholders to investigate various conditions and approaches.

Discussion

The committee discussed their thoughts about a tangible worked example. Some PDT members felt that a worked example was and will be hampered by lacking goals and objectives. Mr. Applegate pointed out that the eFEP has goals and objectives which the Council approved during its development. Although they provided a framework for goals and objectives, they require an evaluation of tradeoffs or prioritization and some felt that they were too broad to be useful for developing a more specific worked example. Dr. Sissenwine recommended that a worked example needs to show a clear and concise approach to what is proposed in the eFEP, including catch management of stock complexes, biomass floors to protect individual stocks, technical interactions in fisheries that can cause discarding or choke stocks, and biological interactions amongst managed species. Ms. Wilke talked about the difficulties the ASMFC had been wrestling with to define objectives for menhaden ecosystem management. It involved stocks managed in other plans that often had competing objectives. Dr. Sissenwine recommended focusing only on what EBFM is intended and might be able to address, such as defining biological reference points that consider interactions amongst stocks and measures to reduce technical interactions and discarding.

Some felt that providing results in absolute numbers would lead to people ‘shopping’ for the outcome that gave the most optimistic result for them, rather than to examine the qualities of the management procedure itself. Others felt that the results needed to be comparable to the stakeholder’s experience, past and present, expressed in numbers that they can understand. Dr. Large recommended that a worked example should be developed as a tool for scenario evaluation and planning.

Several models were discussed which might be used to support a tangible worked example, such as “Hydra”, “Kracken”, and “Ecopath/Ecosim”. Dr. Fay’s approach using four example stocks

to show how catch advice could be generated for a stock complex vs. single species advice showed promise, but would require further development to make it tangible and usable. The committee encouraged further development by Dr. Fay and the PDT, including the addition of more than four characteristic Georges Bank stocks, an interaction term to model the effects of predation, a selectivity term to show how landings and revenue might compare to total catch if EBFM reduced discards and technical interactions, and multiple entry points representing different historic periods and stock conditions. Dr. McKenzie felt it was important to incorporate more species into the model, grounded in real data. Mr. Fletcher thought that it would be helpful to show the effect of environmental cycles and a policy of maximum retention. Many thought it would be beneficial to use the R Shiny App to develop a user-friendly interface to allow people to explore management strategies.

PDT members thought it was important to keep a worked example like this very simple, with few species and a single set of initial conditions. Mr. Applegate recommended that a graduated, ramped approach could be developed starting with a simple model with four species and a single set of initial conditions, but then allow the user to explore some more complexity, such as adding biological interactions and changes in discarding caused by the management scenario with more species and a couple of different starting conditions. It was decided that Dr. Fay would work with Dr. Bell and other PDT members to develop this example further.