Summer Flounder, Scup, Black Sea Bass, and Bluefish

Harvest Control Rule 2.0 Framework/Addenda

Fishery Management Action Team (FMAT)/Plan Development Team (PDT)

Meeting #2 Summary

July 11, 2023

FMAT/PDT Attendees: Tracey Bauer (ASMFC), Julia Beaty (MAFMC), Chelsea Tuohy (ASMFC), Mike Celestino (NJ DEP), Alexa Galvan (VMRC), Mark Grant (GARFO), Marianne Randall (GARFO), Scott Steinback (NEFSC), Rachel Sysak (NY DEC), Corinne Truesdale (RI DEM), Sam Truesdell (MA DMF), Sara Turner (GARFO)

Other Attendees: Lou Carr-Harris (NEFSC), Geret DePiper (NEFSC), Sarah Gaichas (NEFSC), James Fletcher (United National Fisherman's Association/Council AP member), Michelle Duval (Council member), Alan Bianchi (NC DMF), Greg DiDomenico (Lund's Fisheries/Council AP member), Will Poston (American Saltwater Guides Association)

Overview

The FMAT/PDT met via webinar on Tuesday, July 11, 2023 to review background information on the Summer Flounder Management Strategy Evaluation (MSE) and discuss the feasibility of using it in the development of the Harvest Control Rule 2.0 Framework/Addenda.

Briefing materials considered by the FMAT/PDT are available at: https://www.mafmc.org/council-events/2023/jul-11/sfsbsbb-hcr2-fmat-pdt

Summer Flounder Management Strategy Evaluation (MSE) Presentation by NEFSC Staff

Northeast Fisheries Science Center (NEFSC) staff presented a summary of the Summer Flounder MSE's modeling approach and outcomes, as well as a proposed potential application to the development of the Harvest Control Rule (HCR) 2.0 Framework/Addenda. NEFSC staff indicated the Summer Flounder MSE would be most effective as an approach to assess uncertainty across the alternatives and trade-offs between alternatives. It would allow the FMAT/PDT to test and refine all the alternatives, as well as potentially identify alternatives that are not performing as intended or that are not feasible to implement.

NEFSC staff proposed using a stepwise approach with the MSE to analyze the alternatives and assist in the development of the HCR 2.0 Framework/Addenda within the current timeline. The stepwise approach would first analyze broader concepts and then, if time allows, the analyses could get more complex, moving towards more realistic scenarios. The process, as proposed by NEFSC staff, would be as follows:

1) Initial analyses would focus on testing the performance of thresholds included in each alternative's metrics (e.g., trends in biomass or recruitment, SSB/SSB_{MSY}), the definitions of those thresholds, and their associated uncertainty. Everything in the MSE would be held constant except the chosen threshold to test performance and compare across alternatives. The

thresholds could then be refined or, if necessary, the alternative could be discarded entirely if it is consistently performing poorly.

2) The management responses to crossing the thresholds could then be investigated by testing different definitions of "liberal" and "restrictive" measures or testing different target levels of harvest, catch, or fishing mortality of the different bins.
3) Lastly, if time allows, the MSE could test the performance of potential regulations within alternatives. However, due to limited time, regulations may only be developed and tested for one alternative (e.g., potentially narrowed down by the previous two steps) and regulations may be simplified compared to current regulations (e.g., coastwide or regional measures may be evaluated, rather than state-specific regulations).

NEFSC staff noted several important considerations if the Summer Flounder MSE is used during the development of this management action:

- The FMAT/PDT will need to define starting points for measures and thresholds of metrics before any analysis with the MSE can begin.
- Analyses completed using the MSE will need to be prioritized to remain within the current timeline of the HCR 2.0 Framework/Addenda, which must be finalized before the original HCR Framework/Addenda sunsets at the end of 2025. In addition, prioritizing how the MSE is used will help the modelers and the FMAT/PDT avoid getting too caught up with the complexity of some of the current alternatives.
- There will need to be clearly defined roles for both the modeling team and the FMAT/PDT to maximize efficiency.
- Transparency in how the MSE can be used in the development of this management action will be important to manage expectations of the Policy Board (Policy Board), Mid-Atlantic Fishery Management Council (Council), and public. For example, it's not likely there will be enough time to test regulations at the state level; however, the performance of the specific metrics under each alternative can be evaluated at the state level.

Discussion

The FMAT/PDT supported using a stepwise approach with the MSE and agreed it will be helpful to think about the roles of the FMAT/PDT and modelers. For example, what the FMAT/PDT would provide versus what the modelers will need to work on will need to be identified. The Council and Policy Board will tentatively approve a draft document in about a year. It will be important to have some analysis completed by then, so Council and Policy Board members are able to make an informed decision about what alternatives to keep in the document for public comment. NEFSC staff agreed, noting that this highlights the importance of prioritizing analyses to meet those deadlines. The group needs to identify the most important questions to focus on.

Another FMAT/PDT member noted that the Policy Board/Council adopted the Percent Change Approach originally because the complexity of some of the other alternatives and lack of example measures made it challenging to evaluate what implementing the other approaches would look like. The Percent Change Approach was the simplest alternative, and there was not enough time to assess the relative performance of the other options.

One FMAT/PDT member asked if Scientific and Statistical Committee (SSC) Review Panel comments about the Recreational Demand Model (RDM; one of the components of the MSE) have been addressed, or how addressing them would fit into the timeline. NEFSC staff responded there has been a lot of work to address these comments and a short report was written to summarize how the RDM was updated to address the Review Panel's concerns. For example, the RDM, and consequently the MSE were updated to use survey data from 2020, giving an improved representation of angler preferences. They also incorporated additional layers of uncertainty from MRIP into the model. NEFSC staff are currently working on updating the model for this upcoming year's recreational management measures setting process and creating a Shiny app so Monitoring and Technical Committee members can run the RDM on their own. In addition, NEFSC staff are in the process of generating appropriate catch-per-trip distributions for reference years from MRIP to estimate future catch-per-trip.

An FMAT/PDT member noted that the projection period in the original Summer Flounder MSE analysis was 26 years, and questioned if this was an appropriate projection period for an analysis of the HCR 2.0 Framework/Addenda alternatives given the different goals. Alternatives may perform differently based on the length of the projection period. NEFSC staff agreed that this was something the group would need to think about and discuss before any analysis. It will be important to decide what metrics should be analyzed over a short term versus a long term (e.g., angler satisfaction every year versus stock status over many years). In general, MSEs are developed to look at long-term performance. Another FMAT/PDT member said it would be useful to have the projection period long enough to compare the previous method for setting measures (i.e., the goal to meet but not exceed the RHL every year) and the binned approaches (i.e., leave regulations alone over a wide range of conditions until a threshold is crossed). A long-term trend may be able to test stability of measures compared to the outcomes of those measures.

An FMAT/PDT member asked if anything can be concluded or inferred about the performance of the alternatives for black sea bass, scup, and bluefish using the MSE, given that the MSE was developed for summer flounder specifically. The RDM has been developed for summer flounder, scup, and black sea bass, but will not be developed for bluefish given the high amount of catch and release in the fishery. NEFSC staff confirmed this would be a summer flounder-centric approach and did not recommend adding in population dynamics to the MSE for any other species given the tight timeline. However, they did suggest the information learned about the performance of the alternatives for summer flounder may be able to inform decisions for the other species. In addition, NEFSC staff proposed that parameters of the MSE could be changed to reflect the status of other species, and then used to test the performance of alternatives. For example, a higher overfishing limit (OFL) could be implemented in the model, additional uncertainty could be added, or start with a higher biomass. Another FMAT/PDT member agreed that the MSE may be able to answer general questions about the performance of the alternatives for scup, black sea bass and bluefish, but this will not cover all species-specific differences. An FMAT/PDT member also noted that adjusting parameters in the MSE to reflect the status of other species will also have implications for the projection periods that were just discussed. This member believed a longer projection period could also be more useful here because the results would not be driven by initial conditions.

Next Steps

The Council and Policy Board will discuss use of the MSE during their August 2023 meeting. If they give their approval to use the MSE in the development of alternatives for the HCR 2.0 Framework/Addenda, the FMAT/PDT and NEFSC staff will plan future meetings to carry out this work. In the meantime, FMAT/PDT members and NEFSC staff are encouraged to continue to think about 1) how the MSE may or may not be able to assist in the development of this management action and 2) what MSE metrics should be used to measure success, and 3) recommendations of thresholds for metrics in the alternatives. It was also noted that, if the Council/Policy Board give their approval, the earlier the group can start working on this, the better.

Public Comment

One member of the public asked how the HCR 2.0 Framework/Addenda will consider summer flounder's new stock status of overfishing. Staff noted the summer flounder 2024-2025 specifications discussion, which will take into consideration summer flounder's overfishing status, will occur before the Policy Board/Council discusses this management action. In addition, many of the alternatives already have consideration for overfishing built into them.

Another member of the public asked how the fishermen will have any confidence in the models when the models still recommend catching the largest, oldest female fish. NEFSC staff noted that during the development of the Summer Flounder MSE, there were similar conversations about the ways to track the harvest of male and females in the model. The model does not contain any differential stock dynamics, but the harvest of males and females was used as an indicator of performance. NEFSC staff's preference is to not stray too far from the actual model originally used in management support. However, there are ways to address this concern.