



## Ecosystem and Ocean Planning Committee Meeting

September 19 – 20, 2019 Meeting Summary

Baltimore, Maryland

**EOP Committee Member Attendees:** S. Michels, S. Lenox, W. Townsend, S. Gwin, S. Winslow (Committee Vice-Chair), G.W. Elliott (Committee Chair), M. Ruccio, P. deFur (Day 1), A. Nowalsky, M. Luisi (Council Chair)

**Additional Attendees:** S. Gaichas, G. DePiper (Day 1), B. Muffley, K. Dancy, E. Gilbert, J. Deem, G. DiDomenico, A. Applegate (webinar), M. Lapp (webinar)

The purpose of this meeting was for the Ecosystem and Ocean Planning (EOP) Committee to review and provide feedback on a draft summer flounder conceptual model, data availability and draft management questions that could be explored with the conceptual model. As part of the Council's Ecosystem Approach to Fisheries Management (EAFM) decision framework, the Council agreed to pilot the development of a summer flounder conceptual model that will consider the high priority risk factors affecting summer flounder and its fisheries. A technical workgroup has been working throughout 2019 to develop a draft conceptual model and document the presence/absence of all supporting data and pertinent information. Specific feedback and recommendations offered by the Committee to the workgroup for further consideration and development are noted in **bold**.

### **Overview of EAFM Structured Framework and Conceptual Model Utilization and Development**

The Committee chairman began with a review of meeting goals and a brief reminder as to the Council's commitment to the EAFM guidance document and how related to the development of a conceptual model. The Committee's focus for the meeting is to "groundtruth" the information provided by the technical workgroup and ensure these tools, products and process provide something meaningful to the Council.

A number of short presentations were provided by Council and NEFSC staff that gave an overview of the Council's EAFM structured framework process<sup>1</sup>, how that process was used in the development of a summer flounder conceptual model, example conceptual models and

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<sup>1</sup> For more details, see the Council's EAFM Guidance Document at: <http://www.mafmc.org/s/EAFM-Doc-Revised-2019-02-08-palr.pdf>

their potential uses and applicability, and the process undertaken by the technical workgroup to develop the summer flounder conceptual model and associated products.

The Committee discussed the utility of conceptual models generally and then how this conceptual model and associated information might be used in the future to conduct a management strategy evaluation (MSE), the next step in the EAFM structured framework process. A conceptual model can be utilized in a number of different ways including: a visual communication tool, provide for a common understanding of ecosystem and linkages, identify research needs and priorities, generate management and/or science questions, and can be organized in a way to begin building a more comprehensive and quantitative model for use in a MSE. As specified by the Council when they agreed to pilot the development of the model, the draft summer flounder conceptual model was constructed in a way to inform all of these potential applications.

As it pertains to informing the MSE, the summer flounder conceptual model could be used as a comprehensive checklist to scope out the key ecosystem factors when specifying what an analysis could address through an MSE. The MSE process gives the Council the ability to consider management strategies (e.g., alternative summer flounder allocation scenarios) outside the typical process and evaluate impacts across the ecosystem in order to achieve specified ecosystem, biological and/or management objectives. An MSE allows the Council to evaluate consequences and trade-offs to the summer flounder fishery as continued changes in the ecosystem occur (e.g., climate change, distribution shifts, changes in habitat and stock productivity). The Committee questioned whether, given the commitment of time and resources, an MSE was necessary or were other approaches appropriate. Given the scope of the conceptual model and the larger issues the management questions are likely to consider, the Committee agreed that an MSE is likely the best approach to appropriately address these challenges. The Committee discussion highlighted the importance of appropriately specifying the right management question(s) with clear objectives and uncertainty to help ensure an MSE is addressing different perspectives appropriately.

### **Discussion and Feedback on Conceptual Model Elements, Data Sources, and Visualization Tool**

The bulleted list below provides details on the various topics in which the Committee provided general comments, feedback and/or offered recommendations for workgroup consideration or development.

- The Committee supported the workgroup approach of building the conceptual model by starting with the high risk factors identified from the risk assessment and then identifying the key ecosystem elements that drive/affect each risk factor. This includes additional risk factors included in the conceptual model (offshore habitat, stock biomass and stock assessment) but not identified as high risk because of that factor's overall importance and/or linkages throughout the system.

- Consider (in future) ways to textualize how the different elements are aligned – what it impacts and what impacts it – particularly since some elements were combined and include a variety of topics and considerations.
- **Consider including competition/other species interactions with summer flounder** – ex. dogfish and competition for space – as a potential ecosystem element under appropriate risk factor.
- **Review conceptual model visualization and detailed tables for consistency in terminology.** Some elements such distribution shift and change are used interchangeably between figure and tables and within the tables; while some other terminology issues may arise because elements may have been combined in the conceptual model to help “simplify” the visualization but may not be reflective of information in tables.
  - **Map out to ensure 1-to-1 relationships exist for all included elements in tables and conceptual model**
- The Committee discussed the need and/or ability to quantify relationships between elements (i.e., what relationships or linkages are more/less important or have more/less of an impact). Evaluating the importance or weight of any relationship will depend, and likely change, depending on the management question being considered. Therefore, this process would likely happen during the MSE process and the weighting/importance would be done based on the context of the questions/objectives being addressed with input from stakeholders, Council, staff etc. The current model assumes all relationships are equally important. Similarly, the MSE process would also be the appropriate time
- **The Committee discussed whether or not the Water diversion/flow (under estuarine habitat) should be included as an element and asked the workgroup to consider if appropriate.**
- **The Committee noted a separate glossary of definitions for the different elements and to how used by workgroup would be helpful (e.g. community vulnerability)**
- **Consider adding “regulations from other management entities” as an element under the Regulatory Complexity risk factor.** This element is captured under the Technical Interactions risk factor, but the Committee believes this element is also appropriate under Regulatory Complexity.
- **Consider the feasibility and utility of creating a conceptual model visualization that categorizes the current model elements by those that are identified as “within the Councils authority and management control” and those that are not – potentially using a simplified color scheme (e.g., black/white/grey).** Categorizing and visualizing the elements this way might be informative to highlight how much/little is within the Councils control and maybe focus on those areas for future evaluation.
- **Add offshore wind/other ocean uses as an additional risk factor and build out the sub-model (i.e., identify ecosystem elements and associated data availability).** The Committee felt this risk factor (already included within the Risk Assessment) was a very

important issue and should be included in the conceptual model given the likely differential impacts to commercial and recreational fisheries, habitat, science etc. While offshore wind/energy is likely to impact many Mid-Atlantic fisheries, the scope of this issue will be specific to the impacts and implications for summer flounder only. **The Committee also requested the workgroup develop a draft management question pertaining to this topic for consideration at their next meeting** (see additional information in section below). An advisor noted the website/email system “Tethys Blast” as a resource for wind and marine renewable energy information.

- **Consider pollution (e.g., pharmaceuticals and plastics) for inclusion as an element under estuarine habitat**
  - For additional information on this topic, a Committee member provided the following link: [https://www.usgs.gov/mission-areas/water-resources/science/emerging-contaminants?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/mission-areas/water-resources/science/emerging-contaminants?qt-science_center_objects=0#qt-science_center_objects)

After reviewing the details of the conceptual model and all of the supporting documents, the Committee discussed the benefits of the EAFM process and approach and the rationale for continued Council support and prioritization in future implementation plans (i.e., continuing with an MSE as the next step). The Committee noted the significant advancement and progress the Council has made to date to collect, consider and account for ecosystem considerations into the management process. Since this approach is not specifically constrained by the typical management process and requirements, it allows for a more comprehensive approach to address a complex issue that can't be answered through a more straightforward analysis. For example, an MSE could consider allocation alternatives that move away from simply taking allocation from one sector/state and give to another but evaluate system-wide alternatives that increase fleet efficiencies, minimize waste and increase management control. While the EAFM approach requires a lot of work with limited immediate tangible benefits, the Committee strongly believes the Council needs to see this process through to fully realize the return in its investment of time and resources.

### **Discussion and Feedback on Draft Management Questions**

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The Committee then discussed the 10 draft management questions provided by the workgroup. The Committee decided, at this point, to further explore seven managements questions – five from the existing draft list and two new questions. The bullets below summarize the Committee feedback on the existing questions and recommendations for new/additional questions to be developed by the workgroup for consideration at the next Committee meeting.

- Current draft question #1 regarding biological and management implications of summer flounder distribution shifts/expansion was supported by the Committee to keep with no specific recommendations for modification.

- Current draft question #4 regarding estuarine habitat and summer flounder stock productivity was supported by the Committee to keep. However, the Committee offered feedback on the scope and focus of the question for the workgroup to consider. **The Committee recommended making the question broader, allow for consideration of water quality parameters and rephrase the question to make more management focused or clearer as to how this question would be addressed through an MSE.**
- Current draft question #6 regarding approaches to minimize and convert discards into harvest within the recreational sector was supported by the Committee with no specific recommendations for modification.
- Current draft question #8 regarding the most influential elements impacting stock dynamics and management decisions was supported by the Committee with no specific recommendations for modification.
- Current draft question #9 (last question in list) regarding data limitations and the associated variability and uncertainty in utilizing the data was supported by the Committee. While this question would have considered all data and information, **the Committee is interested in focusing this question specifically on recreational data (i.e., MRIP) and implications and how it will aide in Council decisions. Specifically, evaluate the variability and uncertainty in the MRIP data to provide for a more optimized recreational fishery, evaluate the use of the data in the current conservation equivalency process, and simulations evaluating fishery performance and data appropriateness at the state, region and coastwide level.** The workgroup should review the existing question and modify as needed to address these recommendations.
- **The Committee requested the workgroup develop of a new management question focused on allocation.** While allocation is implicitly included or a component of the distribution shift question (question #1), the Committee felt a specific and focused question on allocation is needed. The current process and alternatives considered to date generally take at very binary approach (give/take quota from sector or state) but this process provides an opportunity to look at this issue more holistically. **The Committee supported the development of an allocation question that considers efficiencies to be gained that allows for increased opportunities without necessarily taking fish away from one sector/state etc. Additionally, the Committee was interested in understanding the potential bounds (i.e., min/max) of access to the resource by both sectors and what management strategies might include under either scenario.**
- As mentioned in the section above, **the Committee requested the workgroup also develop a management question focused on offshore wind/other ocean use implications for summer flounder. The Committee noted the following areas for consideration – affects of sound/noise on distribution, science/trawl survey impacts, habitat and productivity implications, and commercial and recreational fishery impacts.**

- The Committee commented that all of the draft questions developed by the workgroup were very relevant and interesting even though not all were recommended for further consideration and noted that certain aspects of some of these questions (i.e., stock recruitment and productivity) may still be addressed as part of the questions still being considered.

### **Next Steps**

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The Committee then discussed the next steps. The workgroup will be meet in mid-October to address the feedback and recommendations made by the Committee. The updated conceptual model, detailed data tables and draft management questions will then be presented to the Committee (and Advisory Panel) again in early/mid-November. At that meeting, the Committee recommend if continued advancement of the EAFM process through development of an MSE should occur in 2020. If so, the Committee will recommend or prioritize the specific management question(s) to be addressed through an MSE. The full Council will review and finalize the conceptual model and all supporting documents, including the Committee recommendations, at the December 2019 meeting. The Committee noted the value of walking through and explaining the development and building of the different conceptual models and the relationship to the detailed tables. This will be important to do for the full Council and consideration on how to do efficiently at the Council meeting and opportunities to provide information ahead of the meeting will be important so members can all be prepared and understand the model and its utility.