



**Ecosystem and Ocean Planning Committee
September 12, 2018 Meeting Summary
Baltimore, MD**

EOP Committee Attendees: Warren Elliott (Committee chair), Stew Michels (Committee vice-chair), Peter DeFur, Maureen Davidson (via webinar), Tony DiLernia, Roger Mann, Adam Nowalsky, Rob O'Reilly (via webinar), Ward Slacum, Mike Ruccio (via webinar), Mike Luisi (Council chair)

Additional Attendees: Brandon Muffley (MAFMC staff), Sarah Gaichas (NEFSC), Geret DePiper (NEFSC), Greg DiDomenico (GSSA), Purcie Bennett-Nickerson (PEW), Michelle Duval (Council contractor)

The purpose of the meeting was for the Ecosystem and Ocean Planning (EOP) Committee to utilize the information from the approved Risk Assessment to begin to identify scientific and management priorities, as outlined in the Ecosystem Approach to Fisheries Management (EAFM) guidance document. The Committee considered different ways to evaluate the Risk Assessment to help identify priorities. The EOP then developed a number of recommendations for Council consideration at their October 2018 meeting (**noted in bold and underlined**).

Review of 2017 Risk Assessment

A short presentation was provided by staff that reviewed the process and development of the 2017 Risk Assessment that was approved by the Council in December 2017. Since then, the Risk Assessment document was updated to reflect the latest information regarding Atlantic Mackerel as a result of the recently completed (November 2017) benchmark stock assessment. It also included additional details and justification as to how the risk level scores for the different Management Element factors were derived by MAFMC staff.

The Committee then discussed possible approaches and timing of incorporating new information and updated analyses into the Risk Assessment. For example, the Offshore Habitat risk element was not included in the final Risk Assessment evaluation because, at the time, the Committee felt the analysis for this factor was still too preliminary and not yet ready for use. Staff at the NEFSC have made progress on these analyses and there may be opportunities to further assess their utility in future iterations of the Risk Assessment. Given the Council's intent to make the Risk Assessment an adaptive document that is reflective of changing and improved information, the Committee agreed the Risk Assessment document should be updated and the most appropriate time to make those changes would occur after the Council received the updated State of the Ecosystem (SOE) Report (presented at the April Council meeting). Based on this, **the Committee recommended the EAFM Risk Assessment document be added as a Council deliverable in the annual Implementation Plan to reflect the most recent information available.**

The Committee then discussed pertinent outcomes of a recent SOE Workshop which was convened to discuss updates and improvements to the next SOE report to help provide the Council with the

most relevant information for management. Given the direct linkage and synergy between the Mid-Atlantic SOE and Risk Assessment, workshop participants were interested in possibly including some Management Elements (i.e. Fishing Mortality Control, Technical Interactions, Other Ocean Uses, Regulatory Complexity and Stability, Discards and Allocation) in future SOE reports to track timeseries or annual changes in Management Elements. The Committee had a lengthy discussion as to what elements might be most informative in an ecosystem context and how to appropriately evaluate an element and its actual impact (e.g. impact on status of target fishery versus impact on the greater economic value to the nation). Ultimately, **the Committee recommended Other Ocean Uses and Technical Interaction elements be included in future Mid-Atlantic SOE reports.**

Risk Assessment Prioritization Options and Conceptual Model Development

Sarah Gaichas and Geret DePiper from the NEFSC gave a presentation to the Committee that reviewed the structure framework process outlined the EAFM guidance document on next steps after the Risk Assessment, possible options on how the Committee may want to consider prioritizing the risk factors, example conceptual models based on the possible prioritization options and then how a conceptual model will then inform the development of a comprehensive Management Strategy Evaluation (MSE)¹. This process is intended to focus efforts and resources to help the Council address ecosystem objectives and answer questions on those elements of high risk and priority. As noted by the Committee, the Risk Assessment, conceptual model development and MSE are iterative tools to be used by the Council to improve management and respond to changing conditions and priorities.

Three different Risk Assessment prioritization options were presented and considered by the Committee.

1. The single species with the greatest number of high risk ranking across all elements – black sea bass and summer flounder tied for the most high risk elements
2. The fishery with the highest landings value (proxy for seafood production and economic benefits) with the greatest high risk elements – the squid fishery complex
3. The risk element with the most high risk rankings across all categories – allocation

The Committee then discussed the different prioritization options and issues and questions the Committee may want to consider when determining a possible preferred species or fishery for further evaluation for a conceptual model. Some members noted that the current prioritization assumes all risk factors are weighted equally and maybe some factors are not as important which could influence what species you might select. In addition, those species, fisheries or functional groups that are the most data rich may want to be considered first. The process of developing the conceptual model will also highlight data needs and help with research priorities.

¹ For more details on next steps, see the “Using the Mid-Atlantic EAFM Risk Assessment: Possible Next Steps” discussion document available under Tab 4 of the October 2018 Council meeting materials: <http://www.mafmc.org/briefing/october-2018>

Committee Prioritization Discussion and Recommendations

The Committee then began to focus on the possible merits, pros and cons of specific species or fisheries that may be selected as the top priority for continued development. Below are the different species or fishery options discussed by the Committee as well as some rationale for consideration:

1. Black sea bass – lots of high risk factors, many management challenges, managing a species under high abundance,
2. Summer flounder – lots of high risk factors, data rich species, management challenges with a species under lower abundance, stock distribution changes
3. Squid fishery complex – high economic value, better management tools to achieve MSY, climate change implications
4. Scup – not as many management issues (i.e. less pressure), high abundance species, address specific management questions (i.e. appropriateness of GRA's, discards, market influences etc.)

Given the potential complexity and the uncertainty in the process and utility of full MSE in the management process, the Committee supported piloting the development of a conceptual model as the next step but not yet committing to an MSE. Based on the results and outcomes from the pilot conceptual model, the Council could then determine if continuing with an MSE is appropriate and beneficial to addressing priority management questions. Testing out a pilot conceptual model process can also help inform the Council as to whether or not the model and risk assessment tools work, provide for a gap analysis to identify potential research/data needs and highlight the most/least important risk factors, and help establish management priorities.

After extensive discussion, **the Committee recommended using the single species Risk Assessment prioritization approach (option 1 on page 2) and to pilot the development of a summer flounder conceptual model.** The Committee felt that while there are a number of issues and priorities with black sea bass, they center around management process, structure and limitations and a conceptual model is not needed to help the Council understand those issues. For scup, while the Committee felt a conceptual model may help answer some specific issues, those were limited in scope and overall value and taking on bigger issues of greater interest were a higher priority. Similarly, the Committee felt a conceptual model for squid would be limited in overall value and may be constrained by limited information. The Committee offered the following reasons in support of the development of a summer flounder conceptual model:

- **High utility** – the fishery has all the management issues, high interest from stakeholders and there are implications for everyone.
- **True EAFM issue** - recreational and commercial issues, economic and job considerations, allocation, climate drivers, species distribution shifts, management challenges
- **Data rich species** – one of the most extensive data sets for any Mid-Atlantic managed species, ability to utilize the results of the benchmark stock assessment to be completed by end of year and a variety of current economic MSE analyses currently being conducted

Potential outcomes of the pilot summer flounder conceptual model noted by Committee members include information on data availability and needs, relative importance of risk factors and elements (i.e. a change in factor X results this positive/negative result in factor Y) and 10 questions that could be answered using the model and data available. The conceptual model development and the potential 10 priority questions would be developed with input from the Council, Committee and Advisory Panel.

Risk Assessment Use in Council Science and Strategic Planning Priorities

The Committee also spent some time discussing potential other uses of the Risk Assessment results in addition to the development of a conceptual model and subsequent MSE. As recommended previously by the Committee, an updated Risk Assessment document that would be provided to the Council each year would include the color-coded summary tables that will provide a summary of the current risk factor scores at the species, fleet and ecosystem level. The updated information will provide a snapshot on those areas of risk that could then be used by the Council when considering management decisions.

The Risk Assessment and prioritization process can also be used to data gaps or data uncertainty which can then help set Council research priorities at an ecosystem, fleet and/or species level. These results can also be used in the development of annual Council priorities and deliverables. The latest version of the Risk Assessment is included in the October briefing book and available for use by the Executive Committee as they meet to begin setting 2019 priorities. In addition, the Risk Assessment will likely play an integral part in the next iteration of the Council's five-year strategic plan. Dr. Michelle Duval is on contract with the Council to help lead the next strategic plan and attended the Committee meeting to listen to the prioritization process and Committee discussion to help inform the strategic plan process. Dr. Duval will be working with staff and Council to help ensure the Risk Assessment results are incorporated into the planning process.