

2021 Council Priorities Scenario Planning

September 2020 Council Meeting



Background

- Many of our fisheries are facing very uncertain times – unpredictable events, climate change, alterations in global markets, etc.
- Our management process has evolved to better address scientific uncertainty such as natural mortality. These sources of uncertainty can be estimated and integrated into the assessment models that support management decisions.
- However, there are unpredictable events such as COVID-19 or extreme heat waves that can completely alter resource availability, markets, and fishing behavior.
- How can fishery managers take these unpredictable events into consideration when making recommendations that are required to maintain sustainable fishery resources and fishing communities? How can the Council plan for the future when these unpredictable events are so uncertain?

(**More info:** Frens, Kathryn M., and Wendy E. Morrison. 2020. *Scenario Planning: An Introduction for Fishery Managers*. U.S. Dept. of Commer., NOAA. NOAA Technical Memorandum NMFS-OSF-9, 38 p. <https://www.fisheries.noaa.gov/resources/all-publications>).

Introducing scenario planning (SP)

- Method of identifying uncertainties and determining options that will meet management goals across multiple possible sets of future conditions
(Peterson, Cumming, & Carpenter, 2003; Rowland, Cross, & Hartmann, 2014; National Park Service, 2013).
- Participants get together and consider different possible future states, or scenarios. Together the group develops robust management strategies for uncontrollable or uncertain environment.
- *How is this different from MSE?* MSE uses model simulations to compare how alternative management strategies meet pre-identified, quantitative based goals. Scenario planning is more descriptive/qualitative, combining local knowledge of the system with some quantitative data to describe multiple plausible future conditions.
- *How is SP unique/new?* Considers broader forces or drivers sometimes outside an organization's control, explores the potential impact of those forces on future conditions, often engages wider range of participants, and stimulates engagement in the process of change (Bizikova & Hatcher, 2010).

Why consider scenario planning in this region now?

- Opportunity to evaluate challenging climate change related management issues, such as redistribution of stocks in a changing ocean environment across multiple Council and Commission jurisdictions.
- Complex jurisdictional issues are coming – SP could be a proactive step.
- What do people think future states of nature are likely to be and what approaches will work best.

- Leadership in the region has been discussing SP as a potential tool to address these challenges and formed a task force to investigate the issue further.

NRCC Scenario Planning Working Group (SPWG)

- Toni Kerns, Atlantic States Marine Fisheries Commission
- Dr. Sean Lucey, Northeast Fisheries Science Center
- Deirdre Boelke, New England Fishery Management Council
- Dr. Wendy Morrison, NMFS Headquarters/Office of Sustainable Fisheries
- Myra Brouwer, South Atlantic Fishery Management Council
- Kiley Dancy, Mid-Atlantic Fishery Management Council
- Emily Keiley, Greater Atlantic Regional Fisheries Office
- Mike Ruccio, Greater Atlantic Regional Fisheries Office (Chair)
- Lauren Bonatakis, NOAA Knauss Marine Policy Fellowship Program



NRCC Scenario Planning Working Group (SPWG)

- NRCC Tasking from Fall 2019
- Goal - put together a proposal that would include the scope, costs, effort, necessary meetings, and available resources.

SPWG Process

- Review/evaluation of other scenario planning efforts worldwide.
- Conversations with staff involved with SP in this region and Pacific.
- Additional research on cost, time commitment, what has worked/what has not, conversations with outside funding opportunities.
- Two google hangout meetings with the full working group.
- Developed a discussion document with findings and recommendations.

Summary of SPWG Recommendations

- #1: Appoint a Core Team
- #2: Hire a professional facilitator with scenario planning experience
- #3: Establish an ad hoc Scenario Planning Committee
- #4: Ensure robust public participation
- #5: Accept The Nature Conservancy's offer to partner
- #6: Two workshop model; 18-36 months

Pros ...

- Opportunity to systematically and collaboratively address daunting complexities and uncertainties of climate change impacts in our management process.
- Enables managers and stakeholders to discuss broader ideas upfront. Exploring different plausible scenarios helps identify the limitations and uncertainties in the current system.
- Some systems or scenarios may be more flexible than others, and this process can help identify systems and strategies that are robust to various possible future conditions.
- Also allows identification of strategies and systems unlikely to be successful under most future conditions.
- Less technical than a Management Strategy Evaluation process that requires more analysis.

...and Cons

- Time and resource intensive.
- Could be complex process with many organizations involved.
- New process for most participants; likely to be skepticism about benefits; need to invest time familiarizing participants with concepts.
- Need to carefully consider application and ensure output is useful in improving current system. Implementing any recommended modifications to management strategies will require additional time and resources.

What next?

- NRCC discussed this topic in July 2020 – general support but still many questions.
- MAFMC work priority for 2020, under consideration for 2021.
- SAFMC briefly discussed at their last meeting, more detailed presentation planned for December or later.
- NEFMC Executive Committee discussed this topic in early September.

- **Agenda today?**

Introduce Scenario Planning as a concept, discuss how it may or may not fit with other 2021 priorities.