



Mid-Atlantic Fishery Management Council
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MEMORANDUM

Date: March 23, 2022
To: Chris Moore, Executive Director
From: Kiley Dancy, Staff
Subject: East Coast Climate Change Scenario Planning Update for April Council Meeting

On Tuesday, April 5, the Council will receive an update on East Coast Climate Change Scenario Planning, including 1) a recap of recent webinars held to explore drivers of change in east coast fisheries and 2) a summary of plans for an upcoming scenario creation workshop.

A summary of the drivers of change webinars will be posted to the meeting page as supplemental material for this agenda item. To inform discussion of the scenario creation workshop, this briefing tab includes a document that was provided to the Northeast Region Coordinating Council (NRCC) for their March 2022 meeting. The NRCC reviewed and agreed to a proposal for a 2.5-day scenario creation workshop in June 2022 in the Washington, DC area. Due to high interest in this initiative and the need to limit in person participants, an online questionnaire will be distributed soliciting applications to participate in the workshop. The core team and NRCC will select a group of approximately 75 participants that balances representation of stakeholder groups and regions. Additional information about the purpose and logistics of the scenario planning workshop can be found in the NRCC briefing document.

The NRCC briefing document also contains a summary of activities planned for after the scenario creation workshop, including a series of webinars to further discuss and develop the scenarios. This will provide an additional opportunity for involvement in the scenario creation process for those that may not be able to participate in the scenario workshop. Following this process, we will conduct an applications phase to directly address the implications of the scenarios and to develop recommendations and other products from this initiative. Council member and other fishery manager input will be particularly critical during this stage.

Additional information and documents from previous phases can be found on the initiative webpage at: <https://www.mafmc.org/climate-change-scenario-planning>. Information about the forthcoming scenario creation workshop will also be posted there once available.

East Coast Scenario Planning

Phase 4: Scenario Creation Workshop - Design and Logistics Considerations For Discussion at NRCC Intersessional Meeting: March 17, 2022

1. Summary of Proposed Scenario Creation Workshop

The core team is seeking NRCC feedback on the following proposed elements of a scenario creation workshop:

- A 2.5-day agenda that includes both plenary and breakout group sessions;
- Proposed dates of June 21-23;
- Approximately 75 in-person attendees, plus an additional ~10-15 facilitators, note-takers and support staff;
- Workshop participants selected based on responses to an online application/nomination questionnaire requesting demographic and representation information as well as short responses about potential workshop contributions. A list of recommended participants will be forwarded to the NRCC to identify any major representation issues.
- A workshop location at a hotel or conference center in a relatively easily accessible city such as Raleigh/Durham, NC; Providence, RI; the Washington, DC metro area; Baltimore, MD; or Atlanta, GA;
- The majority of workshop costs will be covered by the existing grant from NOAA Fisheries (being administered by the ASMFC), with some travel costs covered by NRCC member organizations for select staff, Council or Commission members, and advisory body members.

2. Background

The purpose of the overall ECSP initiative is to explore how East Coast fishery governance and management will be affected by future climate-driven change, with a particular emphasis on changing stock availability and distribution.

The work to date has been to establish the initiative, scope it (in terms of agreed objectives and issues to cover) and explore future drivers of change. As we complete the first three phases, the initiative is in a good position: there are many people interested in the process and are developing a solid understanding of the drivers of change and issues that they think are important to consider in assessing climate change and the next 20 years of East Coast fisheries.

The next key process step is to *create a set of scenarios* – a handful of alternative stories that describe possible future conditions. This is usually achieved in a workshop that brings many different stakeholders together in a multi-day meeting. **The purpose and outcome of the scenario workshop is to create 3-5 plausible yet divergent scenarios about how climate change might affect East Coast fisheries in the next 20 years.**

Designing and organizing a scenario creation workshop involves several decisions and trade-offs, involving participant type and numbers, session duration and location. This document highlights

the different considerations and then proposes an approach to deliver a quality outcome and experience, while also taking account of a range of other considerations, such as representation, access, diversity and cost.

3. Workshop Sessions and Duration

All participatory scenario creation workshops involve a series of conversations and exercises that explore the future. Workshop attendees are asked to review and discuss material, generate ideas and reach agreements as they work towards creating 3-5 stories. Both in-person and remote workshops contain these elements. In-person workshops are typically more conversational, engaging and easier to modify as the workshop unfolds.

Some of these conversations are “divergent” – i.e., they are designed to expand the range of ideas and possibilities that participants should consider (e.g., a brainstorming exercise). Other conversations are “convergent”, designed to limit or constrain the number of ideas and possibilities to be considered (e.g., a voting or prioritization exercise).

Effective workshops employ both types of conversations. In a scenario creation workshop to explore the future of East Coast fisheries, the agenda will most likely include the following conversations / exercises:

- Introductions and context-setting
- Review of drivers of change material and webinars
- Discussion and agreement on changes that we *confidently expect* in the next 20 years
- Idea generation to outline areas of uncertainty and hence several different possible conditions for 2042
- Sharing and comparison of different possible 2042 conditions
- Discussion and agreement on a framework containing 3-5 possible scenarios
- Idea generation to fill in the details of each scenario (i.e., 3-5 stories that connect selected oceanographic, biological and social/economic changes in separate coherent narratives)
- Discussion and report out to summarize the main elements and differences between each scenario
- Reflections and discussion about next steps

This is a lot to cover. Many of the ideas and conversations can be new and challenging to grasp. Because of this, it can be helpful to give attendees time to discuss and process the ideas that are emerging from the group. However, we also realize the difficulties of getting people to commit to participating for multiple days. **We propose that the workshop will be 2.5 days in duration.**

4. Workshop Date

It is important to hold this workshop before the end of June to maintain momentum for the initiative and to remain on track with the project timeline. There are many weeks where existing Council / Commission meetings are already scheduled for later May and June. Accordingly, the preferred dates for the workshop are **Tuesday June 21 - Thursday June 23, 2022.**

This date does not have a competing Council or Commission meeting. It is also convenient for nearly all members of the core team. In addition, a date in late June provides a sufficient time to engage in workshop invitations, participant selection, and planning.

5. Attendee Numbers and Meeting Format

The ECSP initiative has generated significant interest to date. The scenario creation workshop is a critically important part of the overall work, so we can expect that many people will want to attend the workshop. This is a good problem to have – more people at a workshop usually means we can gather a wide range of views in order to inform the scenarios.

But there are trade-offs involved. Large one-off workshops (e.g. involving hundreds of participants) are great for engagement, representation of different regions & roles, and broad idea generation. But large workshops are also more expensive to organize, and trickier to facilitate toward our goal of 3-5 scenarios. Smaller workshops (e.g. 30-40 people) are easier to manage but do not allow for the breadth of representation that this initiative requires.

As a result, ***it is recommended that a workshop be held that strikes an appropriate balance, with ~75 in-person attendees, plus an additional ~10-15 facilitators, note-takers and support staff.*** This number will allow for a broad range of participation, while also maintaining an ability to ensure that the group can discuss and agree on the 3-5 scenarios that will form the output of the workshop.

Jonathan Star, our process facilitator, will lead the workshop. The Core Team will provide most of the facilitation resources, and The Nature Conservancy can help with note-taking and other logistics as needed. It is not anticipated that additional external facilitators will be required.

During the Covid-19 pandemic, virtually all meetings have been on-line. As we transition back to in-person meetings, it is important to acknowledge that there are some benefits to on-line meetings, such as an ability for many more people to log in, observe and, when possible, engage in proceedings. ***Accordingly, the scenario creation workshop should be designed as a hybrid workshop, engaging in-person attendees and others that will view and listen remotely for some of the workshop proceedings.***

On-line participants will only attend presentations and plenary sessions. They will not attend break-out group sessions. They will be encouraged to provide comments and suggestions via an online chat function, but there will be no expectation that these comments will be integrated into the workshop conversations in real time. Instead, the comments will be reviewed at the end of each day and addressed if necessary, during the following days' proceedings. In addition, online suggestions for the scenario stories will be noted and used as the narratives are further developed following the workshop.

6. Attendees and Selection Process

It is important that scenario workshops contain a diversity of participants, in terms of expertise, experience, role and geographic region. One broad way to characterize attendees is:

- Stakeholders – who will be directly affected by these scenarios and the possible changes that might happen to fishery governance and management?
- Knowledge holders – who has the expertise in terms of science, management, on-the-water experience and traditional ecological knowledge?
- Curious and creative “outsiders” – who has perspectives that provide a novel or different viewpoint from others? What new voices should be brought into the conversation? What views are likely to emerge as more important over the next 20 years?

It is also important to make sure that each region (New England, Mid-Atlantic and South Atlantic) is well-represented.

The following provides a classification of 10 different ‘roles’ that cover a wide range of interests regarding the future of east coast fisheries. This can help in planning for a workshop with a diverse set of attendees. This classification will be used to ensure that we have at least 2-3 participants from each category. There is no expectation of equal representation of these groups. Instead, it is expected that some categories (e.g. commercial and recreational anglers) will have more representatives than others.

1. Commercial vessel owners/crew (representing both state and federal waters)
2. Recreational private boat and shore anglers (representing both state and federal waters)
3. Recreational for-hire (party and charter boat) business owners/crew
4. Marketing, suppliers, purchasing and support infrastructure
5. Environmental NGOs
6. Local economic development (e.g. tourism, local authorities)
7. Other ocean users (e.g. wind power, aquaculture)
8. Climate change / fishery scientists
9. Fishery managers
10. Social scientists & economists
11. Tribes, community leaders, concerned citizens

It will be important to identify a number of ‘outsiders’ - new voices who will bring fresh ideas into the mix. To do this, it is necessary to think differently about the approach to inviting workshop attendees. It will not be enough to choose participants based on existing connections, instead, this is an opportunity to bring new voices into the conversations. To encourage new voices and promote coverage of roles that we lack, we propose to invite attendees to apply to attend the workshop.

Selection Process

The core team is designing a very short online questionnaire that will serve as an application to attend the scenario creation workshop. This will be distributed broadly to existing mailing lists, and also to others who have already expressed an interest in this initiative. This questionnaire will describe the details of the workshop (purpose, date, location) and request some demographic information (e.g., role, location, gender, age) that will provide data to help ensure a diverse set of attendees. Applicants will also be asked to provide a very short explanation of why they are interested in this initiative and what they might contribute to the scenario creation workshop.

The questionnaire will be open for 2 weeks (~1st two weeks of April). Following that, the core team will review applications and narrow the range of applicants based on a formula. This formula will be designed to ensure that the workshop is attended by a diverse group (role, region, gender, age) who will contribute effectively to the conversation. Additional information provided by applicants about their interest and potential contributions will be used to further refine a list of recommended participants. This list will be distributed to the NRCC to highlight any specific concerns before finalization.

Applicants will be told whether they are invited to the workshop by early May, providing sufficient time to make final logistical arrangements before the workshop on June 21-23. All applicants who do not make the cut will be encouraged to listen and provide comments electronically and will be invited to later 'scenario deepening' online webinars.

Is the NRCC supportive of this workshop participant application and selection process? Are there any important roles or categories that are missing, and/or are there categories of participants that should be weighted more or less heavily?

7. Workshop Location

The core team proposes that the workshop be held in a location that is easily accessible from locations all along the coast - specifically that it is nearby a major airport with reasonable flight costs from many different locations. It is not essential that the workshop be held in a coastal location. Holding the workshop away from the coast might avoid any perception that the process was biased towards a particular coastal region and reduce the number of individuals that show up in-person not on the list of invited participants. If members of the public do show up in-person they will be permitted to observe the plenary discussions and participate during specified public comment opportunities, but will not be assigned to break out groups etc.

We will identify a meeting location (hotel or conference center) with reasonable facility costs and nearby food options. Some potential location options include:

- Raleigh/Durham, NC
- Washington, DC/Silver Spring, MD/Arlington, VA
- Providence, RI
- Baltimore, MD
- Atlanta, GA

Does the NRCC have any specific feedback about meeting location to consider?

8. Workshop Costs and Financial Support

It is expected that the majority of workshop costs will be covered by the grant from NOAA. A rough estimate for a 75 person meeting with 3 hotel night stays and 3 meeting days is approximately \$62,000, not including additional expenses for enhanced IT needs (if applicable) and lunch catering (recommended to ensure that the workshop timeline stays on track and to encourage additional dialogue among participants).

The Councils and Commission have previously agreed to cover costs for any Council members/Commissioners and staff who will attend. The NRCC should discuss whether the Councils and Commission will also be able to cover the costs of Advisory Panel or Scientific and Statistical Committee members if they are identified as workshop participants, and whether/how that should impact the selection of participants. Additional participant travel can be covered by the NOAA grant, with the exception of federal employee travel.

Are NRCC member organizations still planning to pay travel costs for their staff, Council members, Commissioners, and/or advisory body members?

9. Activities Following the Scenario Creation Workshop

While the Scenario Creation workshop is a vital part of the overall initiative, there will be other important webinars and meetings that follow.

In the weeks following the main scenario creation workshop (i.e. likely throughout July), it is suggested that a small number of 'scenario deepening' online webinars be held. These webinars will encourage attendees to comment on the basic scenarios, and add details so that the storylines are fleshed out and as relevant as possible. This provides an opportunity for hundreds of participants to actively develop the scenarios. In this way, the ~75 attendees at the scenario creation workshop might generate the platform, but many more webinar attendees can supplement with further details.

Further, in Phase 5 (throughout the Fall of 2022), the scenarios will be used as a platform for discussion and suggestions for how East Coast fishery governance and management must adapt to cope with an era of climate change. There will be multiple workshops and working sessions held, based around the following questions:

- Under each scenario, what are the particular challenges that fisheries governance and management would face?
- How well would our current fishery governance and management arrangements cope if these scenario conditions were to occur?
- What needs to change in fisheries governance and management to prepare for these scenario possibilities?
- What are the tools and processes that need to be advanced now to ensure that fisheries are governed and managed effectively in an era of climate change?

These working sessions can be held in a variety of locations and formats. It is proposed that, at a minimum, a scenario planning agenda item be added to each Council and Commission meeting over the Fall. Once these multiple meetings have been held, it is proposed that we hold a summit

meeting in late Fall, where a few representatives from each of the Council / Commission and other meetings will gather. Their task will be to review all the ideas and suggestions emerging from multiple meetings and then decide upon adaptations and new tools that are suitable and feasible to implement. It will be important that fishery managers play a central role in these Phase 5 conversations, alongside many other stakeholders who will offer valuable perspectives and suggestions on these questions.

Appendix: Illustrative Agenda Template for 2.5 Day Scenario Workshop

Day 1

8.30am	<p>Welcome, Overview & Introductions</p> <ul style="list-style-type: none"> ● Manage expectations about the workshop ● Introduction to scenario planning
9.15am	<p>Review of Drivers of Change</p> <ul style="list-style-type: none"> ● Summary of briefing material ● Review of 3 Drivers of Change webinars ● Confident Predictions to 2042 <ul style="list-style-type: none"> ○ When we think 20 years ahead, what factors are we confident about (i.e. should be featured in all scenarios?)
10.30am	Break
10.30am	<p>Key Uncertainties / Building Blocks</p> <ul style="list-style-type: none"> ● Plenary presentation and discussion about ‘critical uncertainties’. When we think 20 years ahead, what factors are important and highly uncertain? ● Set up for afternoon breakout exercises
11.30am	<p>Small Group Conversations</p> <ul style="list-style-type: none"> ● ~10 groups of 8 people. Precise exercise depends on our scenario creation process: ● Combinations of scenario axes (deductive) ● Future events and storylines (inductive)
12.30pm	Lunch
1.30pm	Small Group Conversations (continued)
3.00pm	Break
3.15pm	<p>Small Group Report Out</p> <p>Each group reports out on their work</p> <ul style="list-style-type: none"> ● ~10 minutes per group ● Common themes from small groups ● Discuss framework possibilities
4.30pm	Main session adjourns
5.00pm	<p>Core Team convenes to suggest a framework</p> <ul style="list-style-type: none"> ● This is the chance for a smaller group to work on ‘pattern recognition’ and propose a framework for the following day

Day 2

8.30am	Day 1 Reflections & Hopes for Day 2
9.15am	Proposal(s) for framework(s) <ul style="list-style-type: none">● Based on Day 1 conversations
10.30am	Break
10.45am	Scenario Building - Breakout Groups <ul style="list-style-type: none">● New configuration of groups each work on a specific scenario drawn from the framework● Combine oceanographic, biological, social/economic developments into 3-5 coherent stories about EC fisheries 2022 - 2042
12.30pm	Lunch
1.30pm	Scenario Building - Breakout Groups (cont.)
2.30pm	Break
3.00pm	Review of Scenarios - Plenary <ul style="list-style-type: none">● Each group summarizes main themes and presents out in plenary● Look for patterns, logic gaps, inconsistencies etc.
4.30pm	Adjourn

Day 3

8.30am	Day 1 Reflections & Hopes for Day 2
9.00am	Scenario Review and Comparison Plenary discussion to test for: <ul style="list-style-type: none">● Plausibility (can each story conceivably happen in 20 years?)● Relevance (do the stories tell us different things about changing stock distribution / availability, and do we think they will raise relevant questions about governance and management?)● Challenge (do the stories challenge some of our assumptions about what we think will happen?)● Memorable (can we bring more powerful stories and ideas into each?)● Divergent (are the 3-5 stories meaningfully different from each other?) Are there important issues that the scenario do not yet cover? (Organize in table format to clarify distinctions between scenarios)
10.30am	Break

11.00am	Next Steps <ul style="list-style-type: none">● Suggestions and recommendations for deepening and finalizing the scenarios● Explanation of how they will be used in Phase 5 (application / implications) sessions● What lessons can we draw right now?
12.00pm	ADJOURN