

East Coast Climate Change Scenario Planning

Overview for Council Coordinating Committee

May 2022



Introduction

The East Coast Climate Change Scenario Planning initiative is being conducted by East Coast fishery management organizations to explore governance and management issues related to climate change and fishery stock distributions. Participating organizations include the Atlantic States Marine Fisheries Commission (ASMFC), New England Fishery Management Council (NEFMC), Mid-Atlantic Fishery Management Council (MAFMC), South Atlantic Fishery Management Council (SAFMC), and NOAA Fisheries. A core team of representatives from each of these organizations is working with a contracted facilitator (Jonathan Star of Scenario Insight) to move this project forward.

Scenario planning is a tool that managers can use to test decisions or develop strategy in a context of uncontrollable and uncertain environmental, social, political, economic, or technical factors. It is a structured process for managers to explore and describe multiple plausible futures, termed "scenarios," and consider how to best adapt and respond to them.

Attached to this overview is an introductory brochure for the initiative developed in August 2021, which includes a description of the project objectives and expected outcomes. Additional information is available at the website for the initiative: <https://www.mafmc.org/climate-change-scenario-planning>.

Activities to Date

Scoping Phase: Fall 2021

A scoping process was conducted in the Fall of 2021 to introduce the initiative to stakeholders, to seek input on the draft project objectives, and to solicit input from stakeholders on factors and issues that might shape the future of East Coast fisheries.

Scoping activities consisted of:

- Preparation of an introductory brochure (attached) and a series of introductory videos to introduce the initiative and the concept of scenario planning in this context.
- A series of three 90-minute introductory scoping webinars to introduce scenario planning and the focus of the initiative, and to hold breakout group conversations where participants were able to share their existing experiences of climate change and their perspectives on how it has impacted East Coast fisheries to date. Participants also had the chance to provide feedback on the project objectives, focal questions, and expected outcomes.

- An online questionnaire to capture stakeholder feedback on project objectives, ideas about the factors and issues that might shape East Coast fisheries in the next 20 years, and any other advice or guidance that might be helpful for the planning team as the initiative moves forward.

A full [summary of the scoping process](#) and input received is available on the initiative website.

Exploration Phase: Winter 2022

Building on input gathered during scoping, the exploration phase consisted of identifying and analyzing the major drivers of change that are likely to shape conditions facing East Coast fisheries over the next 20 years. These drivers will form the “building blocks” for the scenario creation workshop planned for June 2022.

These drivers were clustered into three broad categories: 1) Oceanographic Drivers of Change, 2) Biological Drivers of Change and 3) Social and Economic Drivers of Change. Overview documents were created for each category providing background information on trends and uncertainties associated with likely drivers of change.

A series of three webinars was held in February/March 2022 to explore each of the categories above, including speakers and panelists providing their views and expertise on drivers of change in each category. Each webinar was attended by over 175 participants.

A full [summary of the exploration phase](#) is available on the initiative website.

Upcoming Phases

Scenario Creation: Summer 2022

The next phase of this initiative will be a 2.5-day Scenario Creation Workshop, to be held in Arlington, VA on June 21-23, 2022. Through a series of conversations and exercises, participants will create a set of scenarios that describe how climate change *might* affect East Coast fisheries in the next 20 years. Each scenario will describe a different way in which changing oceanographic, biological, and social/economic conditions could combine to create future challenges and opportunities for East Coast fisheries.

About 75 participants will attend the workshop, including a mix of commercial and recreational fishery participants, commercial and recreational support services, environmental non-governmental organizations (NGOs), scientists, fishery managers, other ocean users, and interested parties.

Applications: Summer 2022-Winter 2023

Following scenario creation, the Application Phase of the initiative is where participating organizations will apply the scenarios to help generate ideas and offer solutions to the challenges highlighted in the initiative. This will include exploring what the different scenarios mean for future fishery management and governance and reaching conclusions about any recommendations for changes.

The Application Phase is expected to run from approximately July 2022 to January 2023, tentatively including the following aspects:

- **Scenario Deepening:** Additional meetings will be conducted following the Scenario Creation workshop to refine and add detail to the scenarios described in a Draft Scenario Report. This will allow additional stakeholders to add their input to the narratives to make them more relevant, plausible and divergent from each other. Following these meetings, the core team will revise and finalize the scenarios.
- **Implications and Options Conversations:** In Fall 2022, the Scenario Report will be used as a platform for a series of Implications and Options conversations, likely by region/management body. Participants will consider and discuss questions such as:
 - Under each scenario, what are the particular challenges (and opportunities) that fisheries governance and management would face?
 - How well would our current fishery governance and management arrangements cope if these new 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 in order to ensure that fisheries are governed and managed effectively in an era of climate change?
- **Synthesis of Ideas:** Ideas and potential solutions generated during the Implications and Options conversations will be synthesized into a final set of outcomes and recommendations, potentially via a “summit meeting” to bring together fishery managers from different regions and jurisdictions.

Monitoring: Winter-Spring 2023

Following the Application Phase, the final stage of the initiative will run from February - April 2023. This phase will focus on completing the final reports, and designing a process to continue using the scenarios as a way of informing East Coast fishery management and governance in the future.

EAST COAST CLIMATE CHANGE SCENARIO PLANNING

An initiative designed to prepare fishing communities and fishery managers for an era of climate change

Starting in 2021, the management bodies shown on the right are collaborating on a multi-year scenario planning initiative along the entire US Atlantic seaboard.



Fishing communities and managers have always faced a world of uncertainty. Ocean conditions change frequently and often unpredictably. Adapting to fierce storms, fish showing up in new places or disappearing from accustomed ones, unusually warm (or cold) water, and other changes have always been a part of life for those on or around the ocean.

The coming decades promise to be more challenging than the past. Climate change is a growing threat to marine fisheries worldwide. On the East Coast of the United States, some species have already experienced climate-related shifts in distribution, abundance, and productivity. A continuation – or acceleration – of these changes has the potential to strain existing fisheries management and governance systems.

In an era of climate change, we cannot be exactly sure of the conditions we might face in 20 years' time. But one thing is certain: all those involved in fisheries need to prepare for different, unexpected futures.

HOW YOU CAN GET INVOLVED



Attend a kick-off webinar



Complete a questionnaire



Keep informed

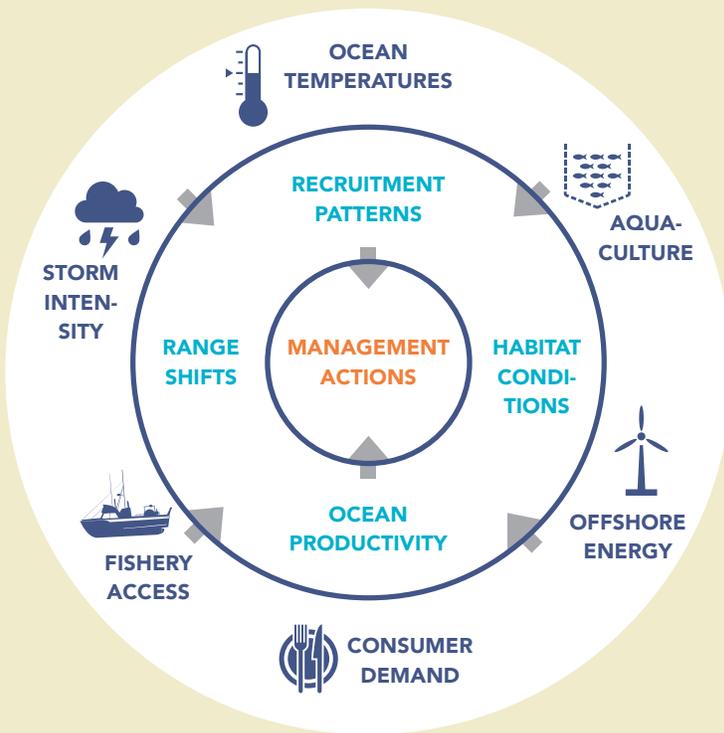
See Page 4 for more details.



To help stakeholders and fishery managers prepare for an era of climate change, we are conducting a scenario planning project. Scenarios are different stories about how the world might turn out tomorrow. Instead of trying to predict the future, scenario planning encourages us to think about all the factors that could shape the world of East Coast fishing by 2040.

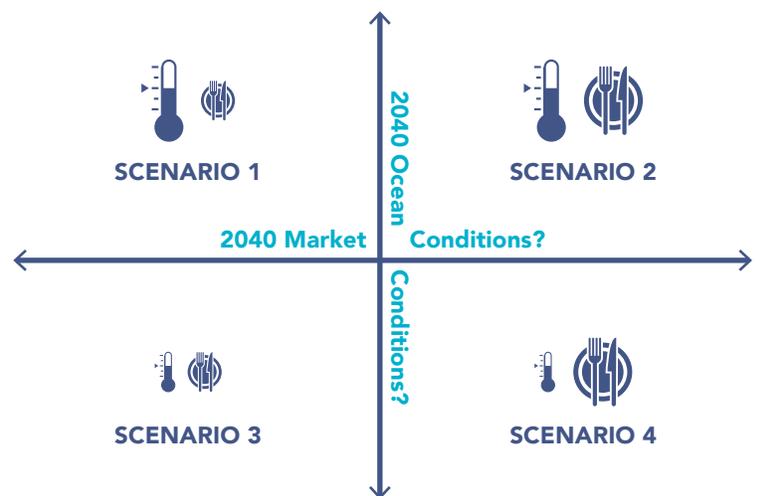


What could shape East Coast fishing by 2040?



What other factors would you include?

Through research and conversations, project participants then settle on a few key factors to form a scenario framework. By imagining what 2040 looks like in each of these quadrants, we can identify smart management actions: changes we need to make to be better prepared for challenges and opportunities ahead. For example, this might mean modifying regional governance structures, or reconsidering how we incorporate climate considerations in management plans.



Illustrative Framework



Project Focus

The specific focus of this scenario project is twofold:

- 1 Assess how climate change might affect stock distribution, availability and other aspects of East Coast marine fisheries over the next 20 years**
- 2 Identify what this means for effective future governance and fisheries management**

The scenario process will discuss a broader set of questions relevant for all participants. How will climate change affect your activities in the decades ahead, and what should you do now to prepare for the future?

Expected Outcomes

At the end of this initiative, currently projected by early 2023, we expect to have:

A set of scenarios

a few stories that describe, in qualitative terms, different ways in which a changing climate might affect the future of East Coast fisheries

A better understanding

of the challenges and opportunities facing fishery management in the future

A set of near-term and long-term management priorities

that help achieve fishery management objectives under a range of different future conditions

Policy recommendations for broader governance changes that improve our ability to adapt to future scenarios

A list of data gaps, research priorities, and monitoring needs for changing conditions

A framework for ongoing conversation and idea generation for all stakeholders to use

This work is not designed to create quantitative predictions about changing climate and ocean conditions. Instead, it provides a strategic tool for us to consider different future conditions and adaptation options. Similarly, it will not lead to immediate regulatory changes. Any policy recommendations emerging from this work will require further consideration and action.



Who Will Be Involved?



RESEARCHERS &
SCIENTISTS



FISHERY
PARTICIPANTS



FISHERY
MANAGERS



COASTAL COMMUNITY
REPRESENTATIVES

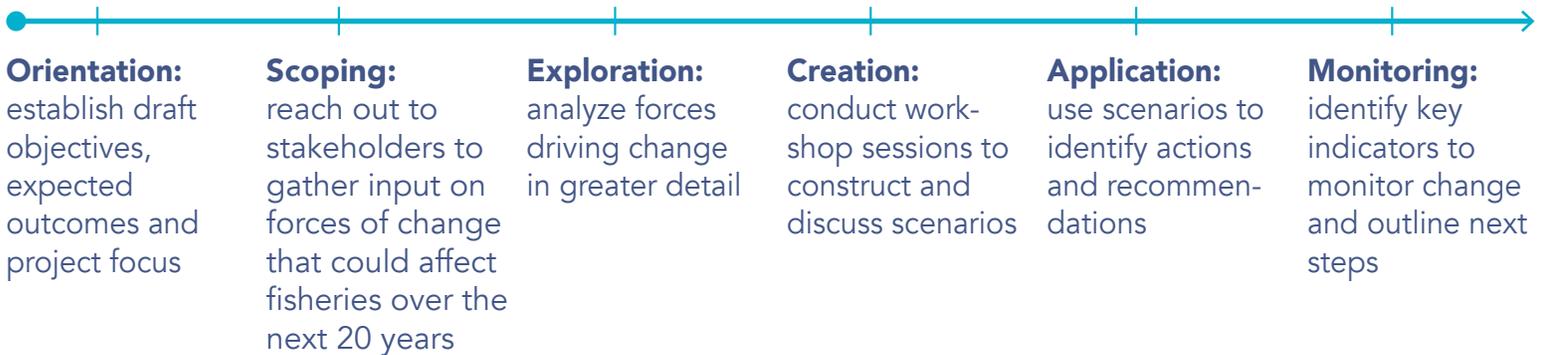


SHORESIDE
SUPPORT



OTHER OCEAN
USERS

Steps in this Multi-Year Initiative



How Can You Get Involved?

Scenario work is most effective when it includes a large number of stakeholders who bring a diverse set of ideas and expertise into the discussions and are willing to learn from each other.

Attend a kick-off webinar, scheduled for:

Monday, August 30, 4-5:30pm ET

Wednesday, September 1, 6-7:30pm ET

Thursday, September 2, 10-11:30am ET

Complete a questionnaire about the ways you think climate change will affect fisheries, and your work, in the future. This online questionnaire will be available at the link below in early September 2021.

Keep informed on developments and further opportunities to engage.

Full details found at: <https://www.mafmc.org/climate-change-scenario-planning>

