EAST COAST CLIMATE CHANGE SCENARIO PLANNING INITIATIVE

Update for MAFMC April 4, 2023 Durham, NC





New England Fishery Management Council



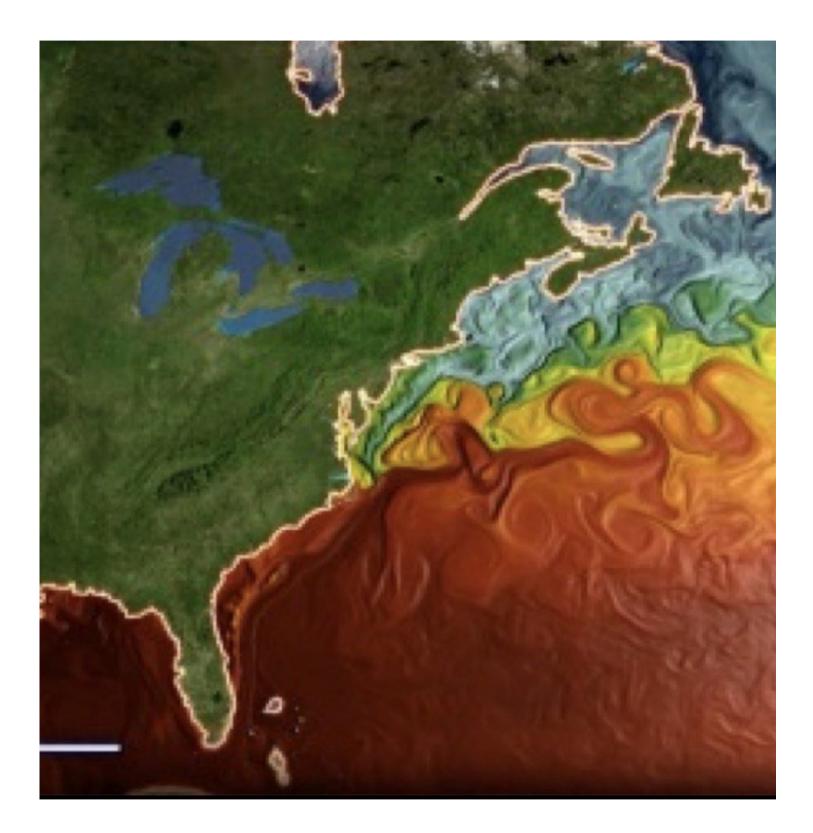




Outline

- February 2023 summit meeting overview
- 2. Summit meeting discussion themes and outcomes (final report not yet available)
- 3. Next steps





Steps in this Multi-Year Initiative

Orientation:

establish draft objectives, expected outcomes and project focus

Scoping:

reach out to stakeholders to gather input on forces of change that could affect fisheries over the next 20 years

Exploration:

analyze forces driving change in greater detail

Creation:

conduct workshop sessions to construct and discuss scenarios



Application:

use scenarios to identify actions and recommendations

Monitoring:

identify key indicators to monitor change and outline next steps

- February 15-16, 2023 in Arlington,
 VA
- Attended by over 50 fishery managers representing 3 East Coast Councils, ASMFC, and NOAA Fisheries
- Summit goal: develop set of potential governance & management actions resulting from scenario-based exploration of the future





Scenario Framework

Mostly maintained Ocean Pioneers Stock pro 0 C n **Predictability of conditions /** ability of science to assess **N** 0 ceme 5

Compound Stress Fractures

Mostly declining

Unpredictable

changes &

conditions, low

ability to assess

Checks & Balance

Predictable changes & conditions, high ability to assess

Sweet & Sour

'Placing Bets' Across A Scenario Matrix

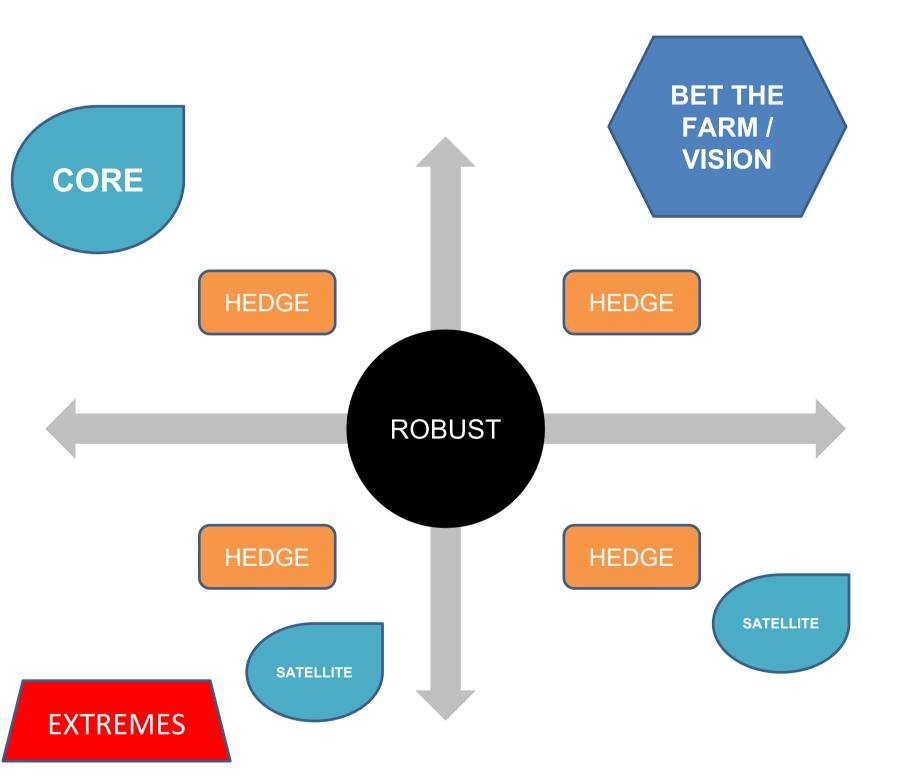
ROBUST: Pursue those options that would work out well (or at least not hurt you too much) in any of the four scenarios

HEDGE: Make several distinct bets of relatively equal size, then wait and see what happens

BET THE FARM/VISIONING: Make one clear bet that a certain future will happen — and then do everything you can to help make that scenario a reality

CORE/SATELLITE: Place one major bet, with one or more small bets as a hedge against uncertainty (experiments)

EXTREMES: Prepare for, or prevent, a worst-case scenario



Key Topics identified by Councils/Commissions

Ocean Pioneers

Unpredictable changes & conditions, low ability to assess

2. Managing Under Uncertainty

1. Cross-Jurisdictional Governance

Compound Stress Fractures

Checks & Balance

3. Data sources and partnerships

Predictable changes & conditions, high ability to assess

Sweet & Sour

Summit Overarching Discussion Themes

Theme 1: Cross-Jurisdictional Governance	 What is the best structure and repre Coast? When and how should management How can we improve the efficiency an plans? How can we improve coordination an entities?
Theme 2: Managing Under Increased Uncertainty	 How can we increase flexibility, adaption How can we better accommodate under address related management challenge How can we improve the ability for fis climate change?
Theme 3: Data Sources & Partnerships	 How should we prioritize data/informent? How can we use current funding models How can we better utilize the fishing What are the best ways to foster outer with other ocean users?

esentation for governance on the U.S. East

t authority change? and the efficacy of joint fishery management

and collaboration among management

aptability, and robustness in management? Incertainty in the stock assessment process and inges?

shermen and other stakeholders to adapt to

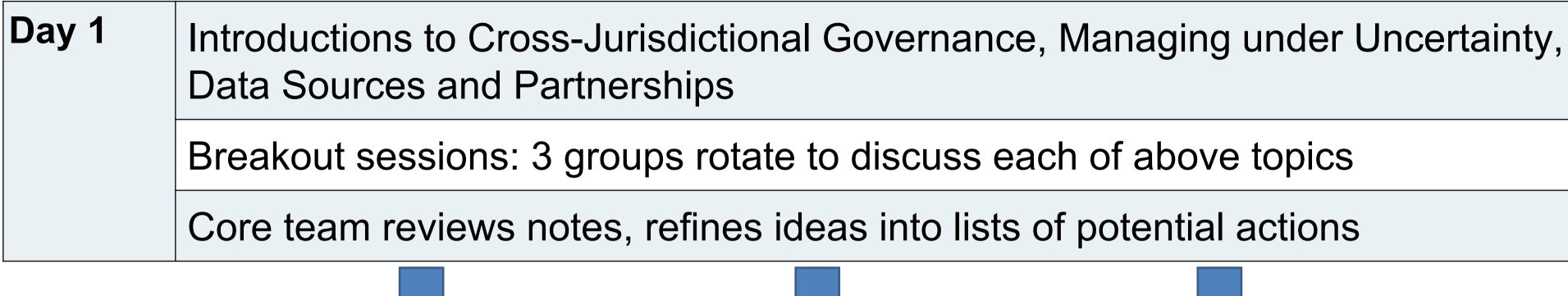
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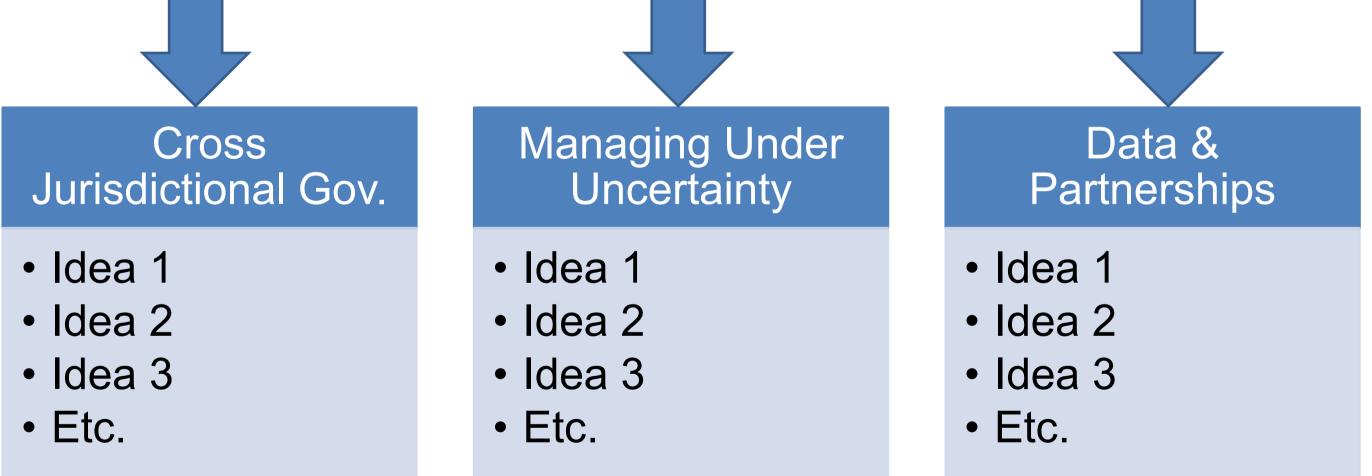
ore efficiently?

ig industry for data collection?

tside partnerships for sharing data, especially

Summit Day 1





Cross-Jurisdictional Governance

- Support for rethinking governance structure, but many would require changes to the Magnuson. Many wanted to start with changes within existing structure.
- Substantial support for moving toward more consistency in the use and structure of Committees between the three Councils. Could address some representation concerns without Magnuson change.
- Support for better mechanisms for information exchange between SSCs, particularly for joint management or cross-boundary stocks.
- Desire to improve coordination between NOAA offices within and across regions.
- Other potential actions:
 - Reconsider/clarify roles of **Council liaisons**
 - Consider allowing **Council proxies**
 - Reevaluate Advisory Panel representation • Develop improved & more explicit agreements for joint management

Managing Under Increased Uncertainty

- Support for improving and better operationalizing risk policies.
- Increased focus on robust management strategies instead of trying to model all possible uncertainties.
- Explore spatial management considerations for species with changing distributions.
- Best practices for including more "if/then" structures in management, with the aim of increasing predictability and nimbleness when quick responses are needed in response to changing conditions.
- Other potential actions:
 - Increased use of community vulnerability analyses
 - Streamlining compliance with National Environmental Policy Act
 - Removing institutional baggage
 - Improving the understanding of the permitting landscape across the East Coast

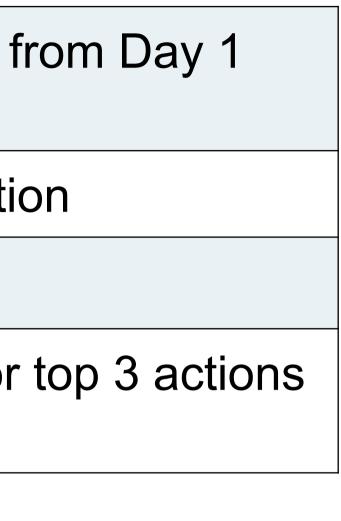
Data Sources & Partnerships

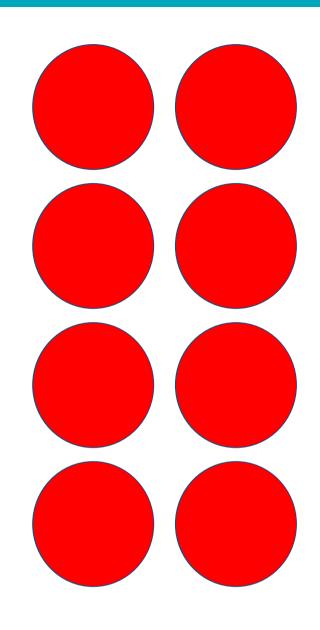
- Broad support for more standardization of data collection to break down geographic barriers along the East Coast (both state and federal)
- Prioritize recreational data collection improvements to reduce uncertainty, including exploration of a recreational study fleet
- Modernize data management systems to facilitate better data sharing and to prepare for new data streams
- Other potential actions:
 - Survey mitigation efforts for offshore wind areas
 - Exploring artificial intelligence to more rapidly process data for assessments
 - Better process between management and science to prioritize data lacksquareneeds for climate ready management, including human dimensions data.

Summit Day 2

Day 2	Plenary review of potential actions resulting discussions
	Breakout groups to clarify each potential acti
	Dot voting exercise to prioritize topics
	Plenary discussion of practical next steps for under each theme







Dot voting:

- 8 votes (dots) per participant
- Voting criteria: will help fishery managers prepare for and cope with climate change; able to influence; feasible to implement/make progress towards

Further Plenary Discussion of Top 3 Potential Actions for each theme

Cross-Jurisdictional Governance	Managing Under Uncertainty	Data Sources and Partnerships
Move to more consistent use of committees across Councils; re- evaluate Committee representation	Improving and better operationalizing risk policies	Expand study fleet, include recreational fisheries and ensure data are used, include shovel- ready data projects
Committee-based decision making with changes to Council SOPPs (Committee motions not approved by full Council get sent back to Committee)	Move away from trying to model more and more uncertainties; focus on robust management strategies	Prioritize recreational data collection to reduce uncertainty including developing incentives for better reporting
Evaluate mechanisms for more cross pollination of SSCs	Include spatial considerations in management for changing distributions (e.g., leading/trailing edge considerations)	Standardize data collection to breakdown geographic barriers along the East Coast (both state and federal)

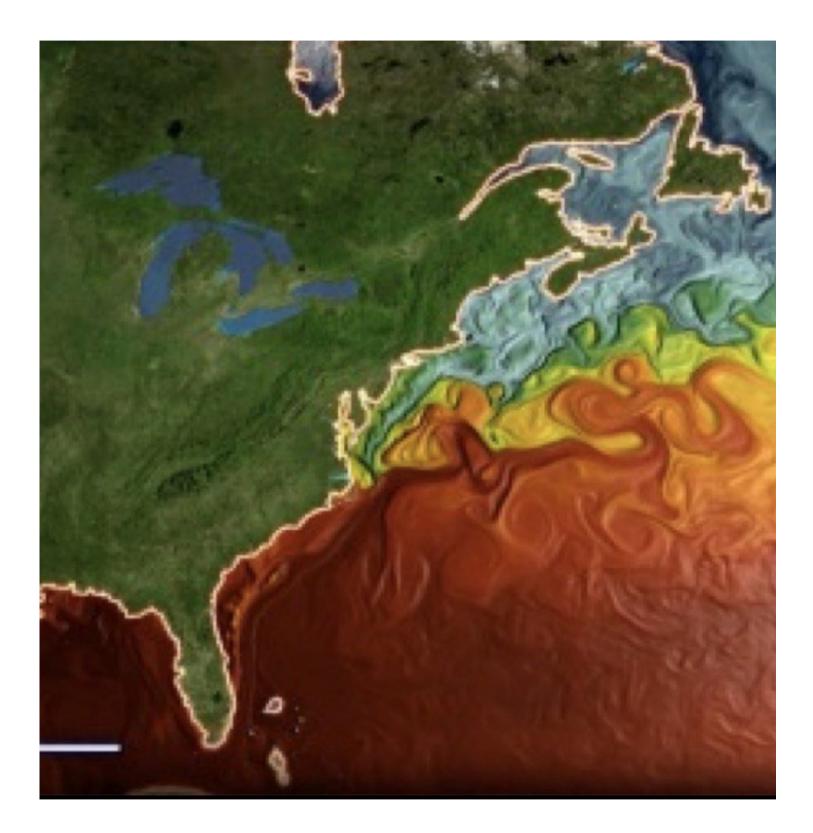
Next Steps

- Finalize summit report and draft action plan for NRCC
- NRCC Meeting: May 9-10, 2023
 - Review summit report
 - Review draft action plan: identifies potential practical next steps for potential actions
 - General process recommendations: Which group(s) should take on the work? How to ensure progress, continued coordination, and allocation of resources?
- Mid-Atlantic Council: later in 2023, further discussion of summit report, NRCC recommendations, and next steps
 - Integrate into 2024 implementation plan and other Council-specific next steps

Backup Slides

EAST COAST CLIMATE CHANGE SCENARIO PLANNING

- Explore how East Coast fishery governance and management issues will be affected by climate driven change in fisheries, particularly changing stock availability and distributions.
- 1. Advance a set of tools and processes that provide flexible and robust fishery management strategies, which continue to promote fishery conservation and resilient fishing communities, and address uncertainty in an era of climate change.



- 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 needs, and monitoring needs for changing conditions
- A framework for ongoing conversation and idea generation for all stakeholders to use

Cross-Jurisdictional Governance

Coastwide Council with varying voting representation by FMP

Committee-Based decision making where Committees have fir

Committee-Based decision making with final Council approval; Council votes send issue back to Committee

Clarify and potentially expand the roles of liaisons between Co

Change state representation on councils

Consider allowing proxies for Council members to alleviate wo

Re-evaluate and potential revise Advisory Panel representation

Evaluate mechanisms for cross pollination of SSCs, particularly jurisdictional species

Move to more consistent use of Committees across Councils a for each Committee/FMP

Improve coordination across NOAA Fisheries Regional Offices

Review joint management plans along coast to explore areas f

Develop more explicit agreements for joint management

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ly for jointly managed or cross-
and re-evaluate Committee representation
s, Science Centers, and General Counsel
for increased efficiency

Managing Under Uncertainty

Identify and establish best practices for if/then trigger management

Look into streamlining NEPA compliance and documentation

Include spatial considerations in management

Consider risk assessments to identify fisheries at risk of not meeting management goals Use qualitative information to improve our understanding of risk. Specifically, better incorporation of local ecological knowledge into management is needed. Consider and clearly communicate intricacies of uncertainty when making policy/ changing management

Improve the use of risk policies to better account for current and future climate impacts on species (both negative and positive impacts)

Move toward robust management options rather than trying to account for all kinds of uncertainty within stock assessment models.

Create a more adaptable structure for fishing permits

identify and remove institutional baggage

Improve the use of community vulnerability assessments

Data Sources and Partnerships

Modernize data management to facilitate better sharing of data and prepare for an influx of new data streams (e.g. offshore wind data)

Focus on Al/technology development to more rapidly get data into assessments

Develop a process between management and science organization to prioritize data needs for climate-ready management (e.g., human dimensions data)

Prioritize recreational data collection to reduce uncertainty including developing incentives for better reporting

Hire staff dedicated to fostering partnerships and coordinating data collection/sharing between other ocean users, management bodies, and within Federal agencies

Expand study fleet, include recreational fisheries and ensure data are used, include shovelready data projects

Use survey mitigation around offshore wind to transition to industry-based surveys or other survey platforms

Standardize data collection to breakdown geographic barriers along the East Coast (both state and federal)

Plenary Discussion of Top Potential Actions

Governance

Quick Wins

- Discussed at NRCC with the addition of the SAFMC:
- Leadership planning exercise to look at Council species committee structure (use of and more consistency)
- Leadership planning exercise to look at the SSC committee structure for cross pollination of Atlantic coast SSCs
- Clarify liaison role and discuss how the liaison could be used consistently across the Atl. coast councils
- Review the Joint and Complementary plans for ASMFC and the Councils for efficiencies (ways to segregate actions so there are less redundant actions) (this may be a short and long term potential action)

First Steps for Long Term Goals

- National convening of SSCs may be venue for additional discussion of ideas about SSC cross-pollination
- How do we find more coordination and consistency between NOAA offices and between the regions?

Managing Under Uncertainty

Quick Wins

- Councils and Commission review and share existing risk policies to determine if climate relevant / applicable to appropriate management actions (if not done recently)
- Each council and commission ID species where there are substantial uncertainties and/or high climate vulnerability and begin to explore alternative approaches to HCRs/risk mitigation approaches??
- ID species where there is a disconnect of fringe state regulations (*de minimus* states at the Commission) in state vs federal waters

First Steps for Long Term Goals

- Consider opportunities for consistencies across regions - perhaps as part of SSC cross-pollination efforts
- Develop common risk policy for jointly managed species

Data Sources/Partnerships

Quick Wins

- Better utilize commercial study fleet and associated projects in Council and Commission work plans and actions
 - Incorporate the development of a recreational study fleet into Council, Commission and Agency work/research/action plans.
- Include plans for a recreational study fleet in the Saltwater Recreational Policy Implementation Plan

at **First Steps for Long Term Goals**

- NOAA develop cooperative research projects that are designed to readily incorporate the data into assessments (shovel-ready projects)
- Expand study fleet into the recreational sector where they are paid for their participation with certain expectations on the data they collect
- Use rec study fleet data to help improve MRIP data
 - Included looking at ways to improve PSEs
- Commit to developing consistent survey protocols along the coast (both state and federal) [This process is underway between SEFSC and NEFSC]
- Start developing AI to better integrate video and camera surveys as well as other large data integration needs