

Climate Change Scenario Planning: Potential East Coast Initiative

April 7, 2020

Overview

- Additional details on Pacific Council's process& next steps
- Possible approaches and considerations for an East Coast climate change scenario planning process



Pacific Council Process

- Initiated in 2018 as part of Council's Climate and Communities Initiative (under Fishery Ecosystem Plan)
- Early 2019: established "core team" to lead process along with contracted facilitator
- Focal question:
 - How will West Coast fishing communities be affected by climate-related shifting stock availability and other developments between now and 2040?



Pacific Council Process

ESTABLISH

Council decides to undertake a scenario exercise

Determine the focus and goals of the investigation

Train a core team in the essentials of scenario planning

RESEARCH

Review existing materials on forces driving change

Interview a selection of stakeholders / experts

Discussions with Advisory Bodies and Council to gather additional views

CREATE

Synthesize
ideas to create
initial 'building
blocks' for
scenarios

Design and prepare for a scenario creation workshop

Conduct workshop (January 2020)

VALIDATE

Construct first draft scenarios

Present to Council (March 2020)

Edit and enhance scenarios as required (March 2020)

APPLY

Use refined scenarios to inform a series of 'implications conversations' with various stakeholders (April-June 2020)

Create final report for Council (September 2020):

- Scenarios: what futures should we prepare for?
- Insights: what do these futures mean for us, other stakeholders?
- Process tools: (how) should we use this approach more regularly?

Source: PFMC March 2020 meeting presentation, https://www.pcouncil.org/march-2020-briefing-book/.



Pacific Council "Driving Forces"

Factors Shaping West Coast Fishing Communities to 2040

- 1. Ocean warming
- Ocean acidification
- Seal-level Rise
- 4. Hypoxia / HABs
- 5. Range shifts and productivity
- 6. Ecological surprises
- Terrestrial climate impacts
- 8. Marine pollution
- Alternative ocean uses
- 10. Aquaculture

- 11. Societal values
- Consumer demand
- 13. Global trade / industry policy
- 14. Regulation and environmental policy
- 15. Protected species status
- Food technology
- 17. Data and monitoring technology
- 18. Fishing industry structure
- 19. Aging of fleet and expertise
- 20. Coastal community development
- 21. Range shifts and productivity

Pacific Council Scenarios Workshop Jan 22-23, 2020





- Approximately 80 participants from diverse fisheries and management perspectives
- Day 1: Background presentations & panel discussions on driving forces; breakout groups develop "sketch" scenarios using combinations of driving forces
- Day 2: More focused scenario development, identified top critical uncertainties, drafted four scenarios for further discussion in FMP/species breakout groups

Resulting Draft Scenarios

I. Changing conditions, moderate unpredictability, few extreme events. High/ increasing abundance. Fishing supported by trade policy, societal values, increasing demand.

Mostly steady changes, few extreme events

Climate and

I. Changing conditions, moderate unpredictability, few extreme events. Low/ declining abundance. Increase in aquaculture + other ocean uses, changing dynamic of fishing communities.

II. Rapidly changing conditions, Increases high unpredictability, frequent/intense extreme events. High/increasing abundance. More data monitoring tech; help fishing

communities prepare for

ocean conditions

surprises.

Highly variable conditions, many extreme events

III. Rapidly changing conditions, high unpredictability, frequent/ intense extreme events. Low/declining abundance. Industry consolidation, ageing of fleet, declines in demand.

Decreases

Species

abund

ance/availability

Pacific Council Next Steps

- Scenario "deepening": sub-group to enhance scenario descriptions
- Advisory Panel feedback
- Present enhanced scenarios to Council in June
- Public and stakeholder engagement process (plan uncertain given covid-19)
 - Focal groups to explore implications of scenarios among fisheries, communities, regions

POTENTIAL EAST COAST SCENARIO PLANNING PROCESS



2020 MAFMC Implementation Plan

- Under Ecosystem and Ocean Planning/Habitat:
 - "Initiate climate change and distribution shift scenario planning"

NRCC Discussions

- November 2019 Northeast Regional Coordinating Committee: agreed to move forward with East Coast scenario planning initiative to explore governance issues related to shifting stocks
- Agreed to form working group to explore & plan, with reps from MAFMC, NEFMC, ASMFC, GARFO, NEFSC
 - Has not yet met

Project Scope & Participants

- Additional discussions needed about how to coordinate this effort, who would participate, roles of each organization
 - One coordinated effort? Separate but coordinated processes?
- Experienced facilitator needed?

Project Scope & Participants

Considerations:

- Distribution shifts and governance issues impact all partners; beneficial to coordinate efforts among all interested groups
- But, broader participation has implications for focusing goals, participation, and applications
- Regardless of approach, close coordination needed; minimize duplicative efforts

Near-Term Planning Questions

- How should this process be coordinated?
 - Hire a facilitator?
 - One coordinated East Coast process? Which partner organizations?
- Who should participate on a core team?
 - NRCC working group?
 - Core team would work with facilitator (if applicable) to focus the questions, plan workshop(s), research background information, produce workshop products, plan application phase

Questions to be Addressed Early in Process

- How should we determine the goals and refine the focal question?
 - Goals, question, and expected outcomes should be clearly defined relatively early in process
- Who should participate in workshops and other parts of the process (e.g., interviews)?
 - Broad range of perspectives & creative thinkers are beneficial
- What future time frame should be considered?
 - Long enough to consider long-term uncertainties; short enough to be relevant to planning & adapting

Intersection with other EAFM Initiatives

- Largely independent, but could draw on past/ongoing initiatives
 - EAFM framework can help frame goals & question
 - Insight from risk assessment could be used to identify and refine driving forces
 - Conceptual model could be adapted to link climate/ ecological factors and sociopolitical factors
 - Overall, intended to advance and support Council's EAFM framework without duplicating efforts

Tentative Timeline

VERY tentative timeline given current uncertainties:

Spring/early summer 2020	Form core team. Core team learns scenario planning, develops draft project plan. Find a facilitator?
Late summer/early fall 2020	Stakeholder and advisory body input to inform driving forces and focal question
Late 2020/early 2021	Scenario building workshop prep/ workshop
Winter/Spring 2021	Workshop follow up, scenario validation, possible second workshop or other process to inform application