Climate Scenarios Workshop Update Crab Plan Team Meeting



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About the Climate Scenarios Workshop – June 5-6, Kodiak AK

- The purpose of the workshop is to generate ideas for short- and longterm management approaches and tools to improve climate resiliency of federally managed fisheries in the North Pacific.
- Participants include Council, SSC, AP, Federal, Tribal, and State agency partners, members of the public
- In-person and virtual participation 150+ registered





Overview

- Origins and context
- Outputs and outcomes
- Scenarios & discussions
- Questions? Ideas?

Workshop eAgenda







Origins and context – past work

Climate Change Task Force (CCTF)

- Convened to support Bering Sea FEP Climate Action Module
- Report: 2022 Climate Readiness Synthesis Evaluates climate readiness of the current management system and identifies opportunities for improving climate resilience

2023 SSC Workshop

 Focus: Rapid change in the northern Bering Sea and southern Chukchi Seas -Identifying ecosystem responses and effects on the management of Federal fisheries

More information: Synthesis of ideas & themes for IRA proposal development



Origins and context – ongoing work

Inflation Reduction Act funding proposal objectives

- Develop a climate-resilient management policy
- Continue work to incorporate local knowledge and traditional knowledge
- Strengthen the consideration of uncertainty and risk in harvest specifications and other aspects of Council management

Programmatic evaluation

 Revisiting Council management policies, goals, and objectives for all Council-managed fisheries and the ability of the current management framework to respond to change





Workshop objectives

- Examine case studies and hypothetical scenarios to explore plausible "what ifs" and identify specific examples of climate readiness needs, barriers, tools, information needs, opportunities, and risks.
- Explore strengths and weaknesses of status quo management and governance for supporting climate readiness of fisheries under the Council's jurisdiction.
- Consider where the pace and deliberative aspect of the Council process is a strength, and where a more rapid response to changing conditions may be appropriate; and clarify the opportunities for and constraints to responsiveness within the Federal regulatory process.



Develop strategies for ensuring a robust and inclusive process for advancing the Council's climate readiness planning.



Outputs and outcomes

- *No Council decisions about next steps will be made at the workshop
- *Inclusive of all regions Bering Sea, Aleutian Islands, Gulf of Alaska
- Specific ideas (objectives, needs, challenges, potential solutions, risks, gaps) for building climate readiness
- Shared vocabulary and context
- Broad concerns and themes of discussion that can inform future work including the Programmatic Evaluation



Key messages about climate scenario planning

- Introduction to climate scenario planning document
- Planning for climate readiness requires planning for a range of possible futures
- Scenario planning involves exploring multiple plausible future scenarios to identify steps for building readiness in an uncertain and unpredictable future
- Scenarios are not meant to be predictive (what could happen, not what will happen)
- Scenarios are based in quantitative climate projections
- The time frame for scenarios is not fixed
 - Climate change impacts are increasing in all scenarios



Scenario development

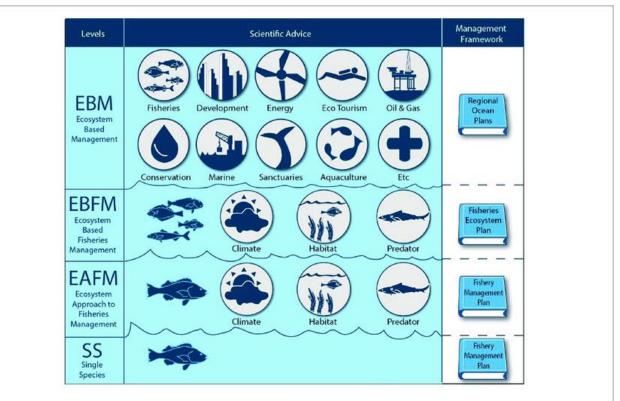
- 4 workshop scenarios + past case studies
- Development process ACLIM and CCTF, reviewed and refined with input from different roles and disciplines
- Each scenario includes a "scenario snapshot" with key details, and additional details (e.g., frequency of marine heatwaves, sea ice and cold pool trends

Scenario descriptions and discussion roadmap



Scenario development

 Framed by 2 key uncertainties: predictability (degree of impacts + predictive capabilities) and level of EBM







Case studies

4 brief case studies to ground scenario discussions in shared experience (thanks CPT members!)

- Gulf of Alaska Pacific cod
- Bering Sea snow crab
- Rapid change in the Northern Bering Sea
- Sablefish recruitment





Scenario 1: Current trajectory

Some progress toward ecosystem-based fisheries management (EBFM), significant climate change impacts, and moderate predictive capabilities





Scenario 2: Best of both worlds

Highly effective and inclusive ecosystem-based management (EBM), lowest potential climate change impacts, and strong predictive capabilities





Scenario 3: EBM and rapid change Highly effective and inclusive ecosystem-based management (EBM), high climate change impacts, and low predictive capabilities



Scenario 4: Siloed management and high challenges

Sector and stock specific management focus, extreme climate change impacts, and low predictive capabilities





Flow of workshop discussions

Discussion roadmap

- 4 breakout sessions
- Concurrent small groups
- In person and virtual (Zoom)

Step 1: Start here

Scenario 1: Current trajectory

Some progress toward ecosystem-based fisheries management (EBFM), significant climate change impacts, and moderate predictive capabilities

Climate change continues to disrupt ecosystems and fisheries. The management tools and policies in place are similar to those used in 2024. Forecasting and planning improve but capacity for adaptation varies widely across fisheries.

Step 2: Consider the best case scenario...

Scenario 2: Best of both worlds

Highly effective and inclusive ecosystem-based management (EBM), lowest potential climate change impacts, and strong predictive capabilities

While there are periodic climate shocks and extreme events, there are strong predictive capabilities, effective consideration of interactions between stocks and ocean users, and more lead time for planning.

Step 3: Now, consider if climate change impacts are severe..

Scenario 3: EBM and rapid change

Highly effective and inclusive ecosystem-based management (EBM), high climate change impacts, and low predictive capabilities

Managers are able to practice effective ecosystem-based management but climate change impacts are more severe than in Scenario 2. As a result, predictive capabilities are low and management is reactive.

Step 4: Now, consider if management is siloed...

Scenario 4: Siloed management and high challenges

Sector and stock specific management focus, extreme climate change impacts, and low predictive capabilities

Extreme climate events and market shocks are common and predictive capabilities are low. Management is reactive and focused on individual stocks, sectors, and fleets. The rapid rate of change creates instability for fisheries and communities.





Workshop discussion questions

- What does climate resilience look like in each scenario?
- What are the challenges to climate resilience?
- What management tools and approaches could help?
- What scientific tools and information could help?
- What other assets and opportunities could help support climate resilience?
 (E.g., diverse knowledge sources, collaborative approaches, community and industry-led initiatives).
- How can the Council support a robust and inclusive process for climate adiness planning?



Next steps

- June: Post-workshop preliminary discussion during staff tasking
- September: Workshop report
- October: Council discussion of next steps; consider how ideas from the workshop may fit into new or existing Council initiatives, and consider how and when to take further action



Next steps

Questions? CPT thoughts? Ideas, concerns, how CPT has discussed climate readiness?

If you plan to attend, please register by Friday 5/17!

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