NORTH PACIFIC FISHERY MANAGEMENT COUNCIL



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Bering Sea FEP Climate Change Task Force REPORT

November 1-2, 2023, AFSC Building 4 Seattle, WA

The Climate Change Task Force (CCTF) held their fall meeting over two days November 1-2, 2023, in person at the Alaska Fisheries Science Center and with hybrid access.

CCTF Members (in person and on-line) in attendance:

Diana Stram, NPFMC (co-chair) Kirstin Holsman, AFSC REFM (co-chair) Lauren Divine, City of Saint Paul Jason Gasper, NMFS AKRO Scott Goodman, NRC INC Mike LeVine, Ocean Conservancy Todd Loomis, Ocean Peace LLC Steve Martell, SeaState Brenden Raymond-Yakoubian, Sandhill.Culture.Craft Jeremy Sterling, AFSC MML

Members of the public participating online included the following: Steve Marx, Megan Williams, Mateo Paz Soldan, Stephanie Madsen, Mary Martinez, Maktuayaq Johnson, Jamie Goen, Maggie Nelson, Sarah La Belle, Maria Davis, Theresa Peterson, Chris Tran, Rose Bennett, Diana Evans, Kalei Shotwell, Chris Siddon, Nicole Watson, Caren Braby, Loretta Brown

The eAgenda for the meeting containing all the in-meeting work products and presentations is available at: https://meetings.npfmc.org/Meeting/Details/3016

Introductions and Overview of meeting objectives

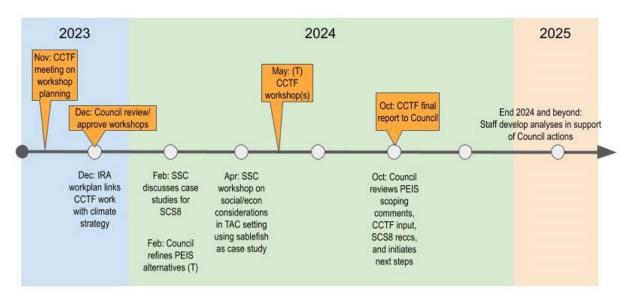
Kirstin Holsman provided an overview of the agenda for the meeting and the overarching objectives of outlining the forthcoming 2024 Climate Scenarios Workshop and planning for that endeavor. Additional items as noted for discussion to assist in this overarching objective included overviews of AFSC and NOAA efforts, Council consideration of Inflation Reduction Act funding and plans, a Climate resilience document put together by the Alaska Bering Sea Crabbers (ABSC's draft resilient fishery action plan) and potential on-ramps for climate information within the continuing development of Ecosystem and SocioEconomic profiles. Additionally, the taskforce intended to review new and existing climate research priorities to forward their input for the FEP team to consider at their meeting in January 2024. It was noted that, where possible, public comment would be taken during each agenda item in a less formalized manner. Several members of the public participated virtually and provided feedback throughout the meeting. All presentations were appended to the eAgenda including on-going work and where applicable are linked within the agenda topics in this report.

Climate Ecosystem and Fishery Initiative (CEFI overview) and update on ACLIM3 and ADAPT (Alaska Dashboard Adaptation Planning Tools)

Kirstin Holsman provided an overview of NOAA National efforts under CEFI, coordination with the Alaska Fishery Science initiatives and an update on operational plans for the ACLIM 3 efforts, timeline and available and developing dashboard planning tools.

Overview of October 2023 Council discussions and recommendations on use of IRA funding by NPFMC

Diana Stram provided an update on Council staff draft plans for the use of IRA funding in 2024 and plans for moving forward over the time frame 2024-2027 for which the money is to be utilized. She also provided a draft staff outline (below) of a potential timeline for coordination amongst separate but related Council actions and future plans between 2023-2025.



Taskforce members requested clarification on the planning for the PEIS and the timing and outcomes of the CCTF Climate Scenario Planning Workshop. She explained that the draft timeframe represented in the table was a Council staff endeavor to show where these different Council (and National SSC) initiatives and workshops are occurring and what products would be available when to inform future Council actions. Specifically, the timing of the Climate Scenarios workshop (CSW) would ideally be scheduled in the Spring of 2024 with the workshop report completed and available over the summer of 2024. This would allow for consideration of the outcomes to be available both during the scoping period for the PEIS and align with the CSW being a potential case study to be considered at the SCS8 in late August with the results of both workshops (and therefore the final report of the CCTF) available for the October 2024 Council meeting. This would allow outcomes of the CCTF work to be considered in conjunction with a range of potential Council future actions including the PEIS.

Summary of CCTF member survey feedback on climate scenario planning workshop plans

Diana Stram provided an overview of results from a summer survey of CCTF members on expectations, locations, timing and engagement for the forthcoming CSW. This provided additional background information in conjunction with the extensive discussions of the recommended approach, which is discussed further below. These results are included on the eAgenda for the meeting and formed the basis of the discussions for the decision points on the Climate Scenario Planning Workshop discussion.

Recommended approach for Climate Scenario Planning Workshop(s):

The CCTF is planning a 3-day public workshop that will occur in Anchorage May 2024 to allow for inclusion of other planned activities that are relevant to the objectives of the workshop (e.g., SSC workshop, etc). We plan to discuss 'scenarios' within a series of plenary discussions and facilitated

breakout groups, repeated over multiple days, aimed at synthesizing and summarizing the critical needs, resources, and process. By the end of the workshop, the participants will have developed a robust and inclusive decision making process and provide recommendations for tools the Council may consider in the future. Additional details on the scope of the workshop and draft scenario development from the CCTF during the meeting are included below.

CCTF 2024 Climate Change Scenarios Workshop

When

Mid-may 2024 (3 days); Anchorage Alaska (tentatively)

Who

NPFMC Climate Change Task Force, Council members, members of the public, community members, fishery participants, managers, and climate and fisheries researchers

Goal

The overarching objective of this workshop is to synthesize and summarize the critical needs, resources, and process to develop and maintain a robust and inclusive decision-making process to respond to climate change effects in the North Pacific. The workshop will be focused on regional management process and would invite attendees and participants to:

- Think broadly about potential solutions and tools within the existing process (incremental) but also beyond existing approaches (transformational); and
- Identify the bigger picture changes that could be effective to address large climate impacts and changes.

The workshop format will include: (a) a combination of interactive breakout sessions with scenario planning exercises designed to explore a suite of potential and plausible 'what if's' in order to identify key needs, tools, information sources, opportunities and risks; (b) facilitated discussion sessions designed to support meaningful information exchange between attendees; and (c) structured format that enables cross-pollination of expertise, experiences, and perspectives in solution explorations.

Scenario planning & case studies

We will use a suite of illustrative future "what if" scenarios and case studies to help inform climate change planning and response. The focus of future scenarios would be for planning rather than predicting, i.e., they will provide the scope for potential future changes that may occur next year, ten years from now, or 20+ years from now. Discussions around these changes and potential future scenarios will help identify near term actions, step-by-step approaches, and long-term investments in information, tools, and management innovations needed to increase resilience to climate change for different fisheries and marine dependent communities of place and practice.

- Case studies will help anchor discussions for what if scenarios and provide concrete examples of gaps and needs as well as successes in weathering climate driven changes to Alaskan marine ecosystems and resources.
- Use of personal experience or recent case studies will also help work through each scenario.

Draft Climate Change planning Scenarios

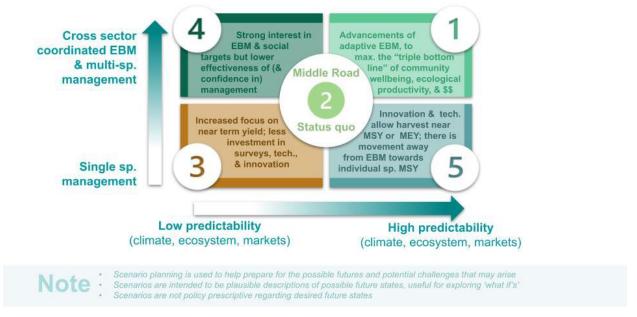


Figure 1. Draft example scenarios similar to those that may be used for the 2024 Climate Scenarios Workshop (scenarios will be developed and refined during workshop planning Jan-Feb, 2024)

Outcomes & deliverables may include but are not limited to:

- 1. Identification of existing and potential climate change-related adaptations and responses, and key risks, barriers, and traps, as well as potential solutions across financial, social, and policy realms.
- 2. Synthesis of potential tools and resources to support resilient fisheries, fishing communities, and fisheries management through the Council process, such as:
 - Tactical and strategic measures/actions, both near-term and long-term,
 - Feasible tools, incremental changes as well as larger/long-term recommendations and potential innovations,
 - Climate-informed tools and approaches, needs, and limits.
- 3. Identification of the critical gaps in the information, tools, and processes to support effective responses and robust planning.
- 4. Summary of recommendations and opportunities that may inform ongoing and future Council actions and policies under a changing climate.

Topics /themes/activities

- Climate Readiness Synthesis (CRS) results and implications
- Rapid response; emergency planning
- Near-term actions to influence longer-term scenarios
- Models, plans, and concepts for climate adaptation and resilience (e.g. Agency, Tribal, stakeholder driven models)

Review of climate-related research priorities

Nicole Watson (NPFMC staff) provided the CCTF with a compilation of new submissions to the NPFMC research priorities based on a request for information posted to the Council's website for several months to solicit public ideas. She indicated which submissions had self-identified as being climate related. The CCTF had also compiled a list of existing research priorities from the database that were climate related.

The CCTF reviewed these priorities and indicated which were considered 'important'. In the interest of agenda time the CCTF was not able to come to consensus on these priorities, nor vote in prioritization thereof and instead provided (attached) a list of priorities for which at least one CCTF member had indicated that it was important. These priorities will be submitted to the Bering Sea FEP team for their consideration at their meeting in January 2024. The CCTF notes that their consideration of specific climate-related indices was a one-time endeavor given the timeline of the completion of the CCTF and that another group needs to be tasked to focus on them in the future.

Long-term on ramps to Council: ESP integration of climate indices as on-ramp

Kalei Shotwell (NMFS AFSC) provided the CCTF an overview of the current ESP development nationally and within Alaska and identified specific on-ramps that would meet the CCTF goals for incorporation of climate-related information into stock assessments and management. The CCTF discussed the indicated wishlist ideas for developing ESPs and the selection of climate indices for characterizing climate readiness by stocks. Some data access issues were noted as well as the indication that CEFI should help overcome the current data access issues. Discussion centered around identification and validation of indices. The validation aspect of some indices (e.g. ROMs) is a critical consideration by area and this makes it difficult to use the data product in ESPs if it is not validated for each region. There is a critical need to acquire information on the areas currently validated and plans for those to be validated and the priority thereof to continue to consider them as relevant indicators for climate in ESPs. Data validation resources are available but should be prioritized based on indices available and needs. The CCTF could possibly identify in conjunction with the workshop which information sources need to be A) robustly predictive in a forecast sense vs B) plausible and realistic. This could be a useful topic of feasibility and investment moving forward.

The CCTF discussed that ESPs are a feasible on-ramp for continued climate information into the Council process. One of the CCTF's charges from the Council was to recommend process for integration of climate information to the management process and the ESPs appear to show great potential for this to be an on-going on-ramp, Kalei noted that in early 2024(January/February) there would be a request for information for crab and groundfish ESPs, and this could also be sent to the CCTF for their review of priorities and data requests and provide an opportunity to review what additional climate information should go out in this RFP. While the CCTF is not meeting during that time the CCTF could provide some review and recommendation via email on ESPs.

Future plans

The CCTF plans to meet virtually February 26th, 2024, to review plans and finalize the agenda for the Spring (May TBD) Climate Change Workshop. The report from this workshop will represent the final output from the CCTF and is intended to be presented to the Council in October 2024.