

# North Pacific Fishery Management Council

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## Ecosystem Committee

### Minutes

September 22, 2017

The North Pacific Fishery Management Council's Ecosystem Committee met at the Alaska Fisheries Science Center in Seattle, WA on 22 September 2017 to review progress made on the development of the Bering Sea Fishery Ecosystem Plan and review the northern fur seal synthesis discussion paper prepared for the October 2017 Council meeting, and an update on 2017 northern fur seal research activities. Consideration of expansion or modification of the Ecosystem Committee's role and membership was also on the agenda, but was not discussed due to lack of time.

Committee members present: Bill Tweit (Co-chairman), Theresa Peterson (Co-chairman), Jeremy Rusin, Stephanie Madsen, Jim Ayres, Jon Kurland, Rose Fosdick, Dave Fluharty, Dave Benton (via telephone), Doug DeMaster (via telephone), Steve MacLean (Council staff).

Committee members absent: John Iani

Others present: Diana Evans (Council staff), Kerim Aydin, Stephani Zador, Kirstin Holsman, Ivonne Ortiz, Brenden Raymond-Yakoubian, Steve Marx, Lori Swanson, Mike Levine (via telephone), Megan Peterson (via telephone)

#### **Bering Sea Fishery Ecosystem Plan**

Diana Evans presented progress to date on development of the Bering Sea Fishery Ecosystem Plan (FEP) and summarized the latest meeting of the BS FEP Plan Team (Team). The Team has met twice since the last update to the Ecosystem Committee, and made substantial progress on development of the Core FEP document. Diana planned discussion around several key topics for which the Team wanted Ecosystem Committee feedback.

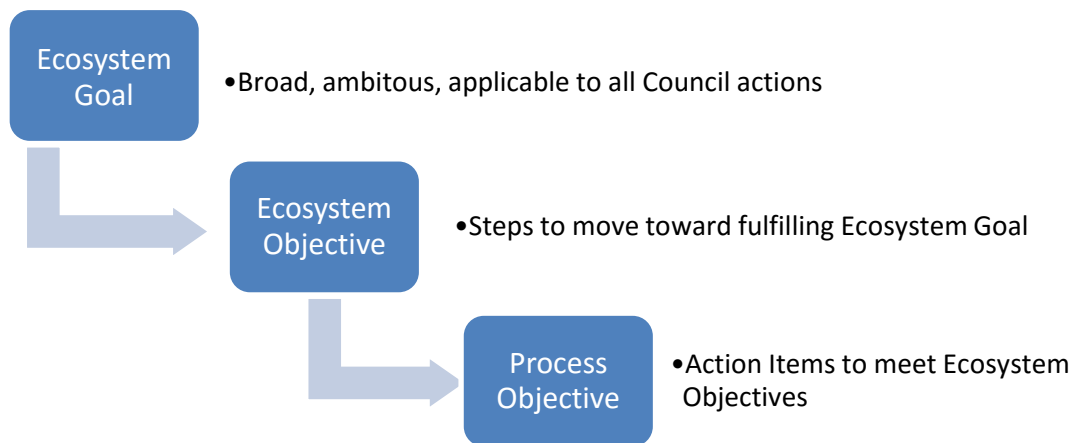
Because no updated draft of the Core FEP has been prepared since the last draft, and summaries of the Team meetings were not prepared, some committee members felt that it was difficult to provide feedback. Committee members noted that development of the FEP is not as advanced as originally planned, and that the timeline for presenting a draft to the Council seems very aggressive. Committee members questioned whether the existing timeline was necessary, and if not, encouraged the Team to provide a draft to the committee for comment before bringing that draft to the Council. Co-chairman Tweit noted that the timing may be "a squeeze" but also noted that it is important to develop a draft of the FEP to maintain progress. Other committee members noted that there is indeed good progress being made, and the Team and Ecosystem committee are in "uncharted waters" in development of the FEP. Committee members generally agreed that it is important for Ecosystem committee review of the draft FEP before it is presented to the Council, and further encouraged the timeline be extended to allow additional review.

Ms. Evans stated that the Team reaffirmed at its last meeting that the purpose of the FEP is to coordinate existing work, rather than to create new work. The intention is to identify which of the current

management activities (NEPA analyses, Ecosystem SAFE, etc.) meet the purposes of the FEP, and identify where gaps exist and identify ways to fill them. Ms. Evans stated that roles of the FEP team are to 1) write the core FEP, and 2) periodically (annually?) review where and how new work fits into the ecosystem-based fishery management perspective.

## Goals and Objectives

Dr. Stephani Zador (FEP Team member) presented modified goals and objectives for the FEP. The FEP is driven by a series of overarching ecosystem goals that are identified in Chapter 2 of the Core FEP document. The goals are purposely designed to be ambitious (e.g., Protect, restore, and maintain the ecological processes, trophic levels, diversity, and overall productive capacity of the system). The Ecosystem Goals are supported by Objectives designed to allow the Council to move toward achieving overarching Ecosystem Goals. Objectives are supported by Process Objectives that identify specific actions that move toward meeting Objectives and Ecosystem Goals.



The committee noted that there appears to be some confusion or difficulty in communicating the hierarchy of goals, objectives, and process objectives and suggested clarifying the terminology. It was suggested that “Ecosystem Objectives” are metrics that lead to meeting the goal, for which progress can sometimes be measured (e.g., Identify connected Being Sea ecosystem components, and their importance for specific management objectives), and “Process Objectives” are the action items that lead to completing the metric (e.g., develop conceptual models).

It was noted that it is necessary to identify the management objective behind each FEP goal or objective to be able to determine whether management policies are being addressed. Ms. Evans again noted that the intention of the FEP was to identify where existing actions (e.g., NEPA analysis of alternatives) meet steps identified in the FEP and address the Council’s management objectives.

## Action Module update

### *Climate Module*

Dr. Kirstin Holsman presented an update to the ACLIM project and the proposed climate module. Dr. Holsman explained that the ACLIM project was designed to forecast climate conditions (SST, bottom temp, etc.) under various climate forcing scenarios, and was designed to provide regular revisiting of potential climate impacts and changes in marine system and dependent communities. There are various levels of assessment, from rapid assessments to ecosystem modelling, depending on available data.

Discussion from the committee ranged from ground-truthing projections to applicability to prioritize research necessary to create more accurate projections (reduced “noise”). Committee members asked how the data products from climate modeling can be incorporated into management decisions. Dr. Holsman

stated that there are few ways that can happen; investigators could examine how different harvest strategies affect projections (What is the risk of doing “X”?), results from iterative runs could inform the next scenarios for analysis to examine both near-term and long-term changes. The assessments were envisioned on a five-year cycle, but there may be need or desire to do them more frequently. Co-chairman Tweit noted that these assessments may be useful to understand how changes could affect “communities of practice”; would target switching be an effective way to address changes in species composition or distribution, how do projected changes affect the percentages of shore-based delivery requirements vs. offshore deliveries?

One committee member noted that although the modeling exercise is useful for many reasons, there has been little discussion about the utility for identifying areas of research to improve climate models overall, and narrow confidence ranges to make projections more precise and/or accurate. Dr. Kerim Aydin responded that the AFSC’s Bering Sea Climate Regional Action Plan was designed to track research over time to inform how to improve both models and their utility for Management Strategy Evaluations. The “handshake” has been designed, but the practical aspects have not yet been developed. Dr. Holsman added that the range of possible questions is nearly unlimited, and any opportunity to narrow the query to particular questions is good.

#### *Research Tracking module*

Diana Evans and Dr. Kerim Aydin presented progress on the proposed module to track research priorities and projects for NPFMC, NOAA, NPRB, ADF&G and other stakeholder/partners.

#### *Subsistence & community issues*

Diana Evans initiated a conversation about subsistence and community issues to solicit input from committee members, particularly those representing rural communities. Ms. Evans specifically requested input on the differences between subsistence information and traditional knowledge, and how to incorporate those types of data into Federal fisheries management.

Rose Fosdick, committee member from Nome, AK, thanked Ms. Evans for the opportunity and stated that traditional knowledge and subsistence information are different, but go hand-in-hand. As an example, Kawerak, the regional nonprofit corporation in Nome, AK, has recently completed a project to document local knowledge of local ocean currents, and their use by subsistence hunters. The local data of surface currents were combined with western scientists understanding of bottom currents. Ms. Fosdick stated that traditional knowledge “needs to be incorporated throughout the core document”, and that traditional observations are as important or true as western science.

Ms. Evans noted that a proposed module is designed specifically to consider how to incorporate traditional knowledge into Federal fisheries decision making, and requested that Ms. Fosdick, or other representatives from the region remain directly involved in the development of the proposed module, if approved by the Council. Ms. Fosdick responded that Kawerak may not have the resources to fully commit, but will provide some assistance and guidance on incorporating traditional knowledge. Other committee members recommended that the Team, or co-chairmen Evans and Aydin, should meet with Ms. Fosdick and other regional representatives about traditional knowledge and how to incorporate those data into the core document and modules.

Committee members also noted that much of the current understanding of the Bering Sea ecosystem is a product of both western science and traditional knowledge, and cited hunters’ and natural resources (marine mammals, eiders) use of sea ice and polynyas as examples. Other committee members noted that the knowledge from Kawerak is regional, and other partners would need to be involved to gather, understand, and incorporate traditional knowledge from other regions (e.g., Aleutians, Bristol Bay, etc.).

Co-chairman Peterson noted that it is important to start with an agreed definition of Traditional Knowledge. Ms. Fosdick shared the definition that Kawerak has developed with Ms. Peterson. The Kawerak definition has also been shared with the Team.

One Council member noted that much of the discussion of traditional knowledge was new to the Council audience, and encouraged the Team to take steps to avoid overwhelming a non-scientific audience. She suggested using the “Stephanie Madsen Test” to direct the conversation to layman’s terms rather than a scientific discussion.

Co-chairman Tweit asked Ms. Evans about conversations she or the Team may have had with the Landscape Conservation Cooperatives (LCCs) regarding inclusion and incorporation of traditional knowledge. Ms. Evans responded that they have not spoken directly with the LCCs regarding traditional knowledge, but there may be potential for partnerships with LCCs if mission or interests overlap. Other committee members expressed reservations over forming formal partnerships with other organizations.

The committee discussion focused on the multiple, complex tasks still required to complete the Bering Sea FEP, and the ambitious schedule required to bring a draft to the Council by December. There was concern among all committee members that the current schedule would preclude a review of a completed draft by the committee. **The NPFMC Ecosystem Committee supports the continued work of the staff and Team on the FEP, and recommends that the Team not be bound by a December delivery date, but rather make necessary adjustments to the schedule to accommodate the recommendations made by the committee, and to allow review of the draft FEP by the committee before presentation to the Council.**

#### Northern Fur Seal synthesis

Steve MacLean (Council staff) provided an overview of the northern fur seal discussion paper prepared for the Council. The discussion paper provides a summary of the historical and recent population status of northern fur seals, history of northern fur seal exploitation and management, and scientific studies to understand northern fur seal demographics and potential interactions with commercial fisheries.

One committee member expressed that comments from the community of St. Paul show signs of extreme distress over the fur seal decline, and suggested that the “Pribilof Islands domain”, defined as an area within a 100-mile radius of the islands, is important for many species. He noted that in some years 30% or more of the BS pollock harvest has come from that area. He further stated that the ecosystem is complicated, overlapping, and it is clear that the ecosystem is in serious distress. He noted that the northern fur seal conservation plan had not been updated since 2007, and suggested that the committee should request from NMFS information on what is happening to update the conservation plan.

Jon Kurland (NMFS, ARA for Protected Resources) stated that he appreciates the renewed interest in northern fur seals and noted that there are many activities that occur related to northern fur seals that are directly responsive to the conservation plan. NMFS has regular engagement on both St. Paul and St. George Islands and have active co-management partnerships on both islands. Mr. Kurland also noted that the NMFS AKR staff position focused on northern fur seals has recently been filled after a 7-year vacancy.

Another committee member commented that the research described in the discussion paper is not a complete list of research that has or is occurring related to northern fur seals, and that the new interest in northern fur seals is not a surprise to industry, but that the Council has already indicated their interest in receiving regular updates from NMFS regarding northern fur seal research and management. One item that could be recommended for those updates is a discussion of the barriers for updating the conservation plan, and whether there is anything that the committee or Council can do to help NMFS update the conservation plan.

**The NPFMC Ecosystem Committee recommends that the Council requests that NMFS provide an update to the ecosystem committee and an opportunity for public discussion on updates to the northern fur seal conservation plan.**

The meeting was adjourned at 5:15 PM.