

# North Pacific Fishery Management Council

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## NPFMC Ecosystem Committee Minutes October 3&4, 2016 Anchorage, AK

### Minutes

Committee members present: Bill Tweit (Chairman), Stephanie Madsen, Jim Ayres, Rose Fosdick, Jeanne Hansen, David Fluharty (phone), John Iani (10/4), David Benton (phone, 10/4)

Others present: Matthew Eagleton, Jon Warrenchuk, T. Scott Smeltz, Jen Marsh, John Olson, Brandee Gerke, Julie Raymond Yakoubian, Stefanie Moreland, Buck Laukitis, Lori Swanson, David Witherell, Megan Mackey, Kurt Iverson, Charlotte Schiaffo, Doug Limpensel, Brianna Bowman King, John Neilson, Nicole Kimball, Becca Robins Gisclair, Tim Robertson, Claire Roberts, Steve Marx, Maura Sullivan, Megan Alvanna-Stimple, Mike LeVine, Andrew Hartsig,

The North Pacific Fishery Management Council's Ecosystem Committee met in Anchorage, AK on October 3 from 12:00 – 5 PM and on October 4 from 9 AM – 12:00 PM. The purpose of the meeting was to review the summary report for the 2016 review of Essential Fish Habitat (EFH) in Alaska, review a proposed method to evaluate the effects of fishing on EFH, review the draft report of the effects of non-fishing activities on EFH, review and provide comments on NOAA's Ecosystem Based Fishery Management (EBFM) roadmap, and review the Ocean Conservancy's Bering Sea and Bering Strait shipping risk assessment. The committee also heard about a proposed project from Dr. Ivonne Ortiz at AFSC.

### Essential Fish Habitat Review

Steve MacLean and John Olson presented information about the 2016 review of EFH, including a summary of stock assessment author recommendations about updates to EFH, and a review of the comprehensive maps of EFH that were requested by the Council in April 2016. The committee noted that in April 2016, the committee recommended that the Council begin the process to revise EFH, as recommended by the stock assessment authors. Because there has been no change in the stock assessment authors' recommendations, **the committee passed a motion, without objection, recommending that the Council update EFH definitions, as noted in the April 2016 minutes.**

There was discussion about which maps should be used to define EFH, and whether it was appropriate to combine the dissimilar outputs from the GAM models (used for summer) and the MaxEnt models (used for fall, winter, spring). The joint groundfish and crab plan teams expressed concern about using the combined maps, and there was discussion at the committee about whether those dissimilar outputs were combined appropriately. There was also discussion about whether it would be appropriate to retain seasonal maps of EFH, but combine life stages of species in those maps. Agency staff informed the

committee that the MSA requires EFH maps for each life stage of each species, which prohibits that sort of combined map. There was concern that seasonal maps could result in a certain area identified as EFH during some part of the year, but not at others (e.g., an area used by a species in summer but not winter would be identified as EFH on the summer map, but not on the winter map). Agency staff responded that the purpose of EFH is to avoid and minimize impacts of federally authorized activities, and having seasonal information is helpful in that process. **The committee passed a motion, with one abstention, recommending that the Council identify EFH by species, by life stage, and by season as presented in the 2016 Tech Memos.** In speaking to the motion, the maker noted that these maps are produced by the best available data, with the best available methods, and provides more specificity in EFH definitions than a combined, annual representation. If combined maps were desired, it would be necessary to convert the summer GAMs to MaxEnt (presence only) models, which the committee felt did not meet the best available science standard. It was also noted that this approach allows federal action agencies to clearly understand where and when their proposed projects may affect EFH.

During discussion there was question about why the Council initially selected the 95<sup>th</sup> percentile shape as the recommended definition of EFH, and whether the stock authors explicitly approved the 95<sup>th</sup> percentile shape. Agency staff noted that the agency does not have a recommendation of which shape best identifies EFH, but stated that the 95<sup>th</sup> percentile shape meets the spirit of EFH to allow for consultation for federal actions that may affect EFH. It was noted that at least one stock author had recommended using a shape other than the 95<sup>th</sup> percentile (25<sup>th</sup> or 50<sup>th</sup> percentile), and there were questions about how to address that recommendation. It was also suggested that EFH research priorities may request studies to consider whether the 95<sup>th</sup> percentile, or some other percentile, is most appropriate to define EFH, and suggested that the SSC may be the more appropriate body to address the scientific implications of that question. The committee recommended that the report authors should add information about the rationale for selecting the 95<sup>th</sup> percentile shape in the summary report, or in an amendment package, should the Council wish to proceed with new definitions of EFH.

## **Effects of Fishing on EFH**

Steve MacLean presented a proposed method developed by a subcommittee of the SSC to facilitate the assessment of the effects of commercial fishing on EFH to determine whether effects may be more than minimal and not temporary. The SSC requested and the Council approved a subcommittee charged to develop objective methods and criteria to apply the results of the Fishing Effects model. The subcommittee proposes a hierarchical method that provides objective criteria that, if met, would prompt stock assessment authors to take additional steps to investigate whether there are correlations between impacts to EFH and trends in life history parameters of managed fish stocks. The presentation requested review and comment by the committee on several aspects of the proposed method, including the selection of the Core Essential Area (CEA), the 10% habitat reduction threshold, the P-value of 0.1, and the selection of appropriate geographical areas for the analysis.

After the presentation, there was concern raised that the Fishing Effects model was developed in New England, for use with north Atlantic stocks. Dr. Brad Harris (Alaska Pacific University, SSC) responded that this is a persistent misunderstanding of the Fishing Effects model. He stated that the Fishing Effects model was developed as an Alaskan model, adapting and incorporating some of the components of the Swept Area Seabed Impact (SASI) model developed in New England to evaluate their fisheries' impacts on EFH in the North Atlantic. The Fishing Effects model incorporates the database of global literature,

which contains literature describing impacts of fishing gear in Alaskan waters and studies from around the world, and is continually updated as new literature is published.

Concerns were also raised that the evaluation of fishing impacts on EFH in New England addressed impacts to deep-sea corals outside the SASI evaluation, and there was concern that the long recovery times assumed for many deep-water corals were not addressed in that model and could be overlooked in the Fishing Effects model. Mr. Scott Smeltz (APU) demonstrated that after this concern was raised in April 2016, the developers of the Fishing Effects model modified recovery parameters to include a 50-year and a 100-year recovery time for some species to address these concerns.

Committee members noted that in general, they rely on scientific reviews by the plan teams and SSC, and were not prepared to address the technical questions posed in the draft discussion paper. They noted that it is important to address the concerns that were raised during the 2004 CIE review. After brief discussion, the committee recommended that the discussion paper evaluate using the 25% and 75% thresholds to assess the impacts of choosing a 50% threshold, and consider evaluating a 5% and 20% habitat impact threshold to trigger additional analysis. The committee also expressed concern that stock assessment authors may select areas of analysis ad hoc, and suggested that a protocol or guidelines should be developed as a basis for choosing something other than the CEA.

### **Effects of non-fishing activities on EFH**

Matt Eagleton (AKR HCD) presented a draft report summarizing the effects of non-fishing activities on EFH in Alaska. The draft report expands on previous evaluations of non-fishing impacts, and includes linkages between freshwater (headwaters) and marine EFH, and a summary of potential climate change and ocean acidification impacts on EFH. Committee members noted that this draft report contains much more information than previous analyses of non-fishing impacts which generally were limited to potential impacts and suggested conservation recommendations. Agency staff noted that many of the additional sections were a result of requests by the ecosystem committee during the 2010 EFH review.

There was substantial discussion about whether and how the non-fishing impacts report should address or link to other documents and policies currently in place or being developed (e.g., EBFM policy and roadmap, Arctic initiatives, climate change action plan, Council FEPs, etc.). Some committee members felt that the document should include an analysis of how those other initiatives address activities that may impact EFH, while other committee members felt that the draft analysis should be limited to as assessment of effects and proposed conservation measures. Agency staff suggested that the EFH research plan that is updated annually is a way to address linkages with other initiatives (e.g., emphasis on deep-sea corals, mining impacts on crab habitat, etc.). After discussion agency staff proposed that they could draft some language to add to the report that acknowledged that other initiatives affect non-fishing activities and provide some information about those linkages.

### **Ecosystem-Based Fishery Management Roadmap**

Chairman Tweit introduced the NOAA EBFM Roadmap, and noted that the Council requested comment from the ecosystem committee. Mr. Tweit also walked through the Council's initial comments to the roadmap (July 12, 2016) and the Pacific Fishery Management Council's comments (September 30, 2016). Mr. Tweit then requested comments from each committee member that could be included in a letter, should the Council choose to write one.

Committee members noted that the NPFMC and other FMCs have already taken many of the steps identified in the EBFM roadmap, and those steps should be acknowledged. Committee members expressed concern that the EBFM policy and roadmap appear to be a more centralized program that does not consider regional differences and regional needs that are best addressed through the regional Fishery Management Councils (FMCs). The Roadmap should acknowledge and allow for the unique nature of each FMC managed resources and ecosystems. There was some concern expressed that no funding for the Regional and Council positions and activities in the roadmap was identified, and concern that because the Roadmap lacks specific prioritization, funding could be diverted from other important activities. This point was emphasized in a comment that the roadmap and associated activities appear “top heavy” with positions and activities concentrated at Headquarters rather than regionally. Committee members noted that it will require significant resources, both staff time and financial, for FMCs to address the Roadmap’s guiding principles, and suggested that the agency should distribute resources regionally, rather than at HQ. Committee members suggested that the Roadmap should explore ways to include public – private partnerships (such as NGOs) to fund these initiatives, encouraging that funds should be spent in regions first. It was noted that private organizations in Alaska (Bering Sea Crab Foundation, Pollock Conservation Cooperative Research Center, etc.) are already funding a great deal of research that address many of the questions identified in the Roadmap, and the Roadmap should recognize and encourage these partnerships as an important element in EBFM.

Committee members agreed that the roadmap should better identify how these actions are connected to issues important to communities within the areas of jurisdiction, particularly communities that may not benefit directly from commercial fisheries but are dependent on subsistence fisheries or recreational fisheries not directly managed by the Agency (e.g., Bering Straits region). Many of those communities in Alaska are dependent on subsistence harvest of animals protected by the Marine Mammal Protection Act and Endangered Species Act, and there was concern that the roadmap provides very little information about how the proposed activities and policies interact with protected resources laws, other regulations that affect subsistence harvests, and how the roadmap integrates the single species management of the ESA with an EBFM approach. Committee members encouraged the agency to include clear, direct methods to include and involve traditional knowledge in the roadmap, rather than simply inform holders of traditional knowledge after the fact.

Committee members also questioned the authorities of Ecosystem Based Fishery Management, and their relationships with existing laws, including MSA and their provisions for EFH and bycatch reduction. It was noted that these appear to be two programs that are moving down parallel tracks, but the roadmap does not include information about how the EBFM policy and MSA are integrated.

Committee members also noted that many of the terms in the Roadmap are not defined (e.g., resilience, risk, etc.) and encouraged the agency to provide explicit definitions of those terms in the Roadmap.

### **AFSC request for letter of support for proposal**

Dr. Ivonne Ortiz (AFSC) presented information about the Bering Seasons Project, a proposal to further develop the seasonal forecasting ability of the AFSC to provide short-term (9 month) forecasts of eastern Bering Sea conditions for the purposes of fishery management and Native Alaskan community subsistence access. This project would expand the Agency’s ability to provide short-term information such as that which is currently include in the Council’s Ecosystem Status Report using downscaled

climate information coupled with ecosystem models. The AFSC is seeking \$170,000/year for 3 years to expand their seasonal forecasting ability, and have requested a letter of support from the Council.

Council members questioned the PI about how these models would be relevant to existing Council responsibilities, including EFH identification and evaluation. Dr. Ortiz explained that hindcast simulations have already been used to identify EFH, and projections may also be important to identify EFH, and to predict impacts of annual management decisions.

After discussion, committee members concluded that although the methods or technical merits of the proposed project have not been reviewed by the ecosystem committee, the proposed project could provide information useful to the Council in their management decisions, and useful to rural Alaskan communities. The committee noted that the SSC is normally the council body that is entrusted with scientific reviews, but expressed general but not unanimous support for a letter of support from the Council. Dr. Ortiz offered that the PIs would be pleased to have SSC review of the project if the project receives funding, the committee appreciated and supported that offer.

### **Future ECO meetings**

The ecosystem committee proposes the following future meetings:

December 2016 – review proposed methods to evaluate the effects of fishing on EFH, receive update on progress to develop the Bering Sea Fishery Ecosystem Plan including update to schedule.

April 2016 – review proposed amendments to FMPs to revise definitions of EFH and review evaluation of fishing impacts on EFH (pending Council decision).