



North Pacific Fishery Management Council

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Ecosystem Committee

REPORT

January 25-26, 2022, via Zoom

<https://meetings.npfmc.org/Meeting/Details/2481>

Committee:

Bill Tweit (Chair)
Jim Ayers
Dave Benton
David Fluharty

Rose Fosdick
Gretchen Harrington
John Iani
Stephanie Madsen

Theresa Peterson
Jeremy Rusin
Diana Evans (NPFMC)

Agency staff attending included: Karla Bush, Malinda Chase, Sara Cleaver, Stefanie Coxe, Raychelle Aluaq Daniel, Maria Davis, Sean Eagan, Anne Marie Eich, Kate Haapala, Charlene Felkley, Kilali Gibson, Jeremy Harris, Bill Hines, Carey Kuhn, Ned Laman, Doug Limpensel, Megan Mackey, Aaron Martin, Dave McGowan, Peter Murphy, John Olson, Olav Ormseth, Jodi Pirtle, Sarah Rheinsmith, Megsie Siple, Diana Stram, Jim Thorson, Mike Williams, Molly Zaleski

Public attending included: Shannon Carroll, Ruth Christiansen, Lauren Divine, Lia Domke, Ben Enticknap, Bruce Ervin, Lilian Hart, Jamie Karnik, Nicole Kimball, Mike LeVine, Steve MacLean, Heather Mann, Steve Marx, Susan Murray, Tom Panamaroff, Mateo Paz-Soldan, Brenden Raymond-Yakoubian, Becca Robbins-Gisclair, Andy Schroeder, Michelle Stratton, Ernie Weiss, Jaylene Wheeler, Megan Williams

The Chair opened the meeting with introductions and a discussion of the agenda, which included: 1) a review of marine debris events and response in Alaska, 2) annual updates on the status of northern fur seals from NMFS and co-managers, 3) a review of EFH modeling methods for determining habitat distribution and evaluating fishing effects on EFH, 4) a discussion of forage fish as considered in the Council process, 5) progress to date planning a second Council ecosystem workshop, 6) an ongoing discussion about the Ecosystem Committee's role for the Council, and 7) other business.

Marine debris

Diana Evans briefly summarized a staff paper on marine debris in Alaska, and Peter Murphy, of the [NOAA Marine Debris Program](#), provided an in-depth presentation on the NOAA program, specific marine debris events and activities in Alaska, and the process for developing an Alaska Marine Debris Action Plan. The Committee appreciated the excellent presentation from Peter, and had an active discussion about collection projects; work to identify and reduce sources of marine debris, and the difficulties of working internationally; and the degree to which fishing gear, and especially foreign vs domestic, contributes to debris in different Alaska areas. Peter highlighted that the availability of public grant awards, and he hopes to launch a collaborative process to develop an Alaska Action Plan in 2022.

The Committee received public comment from three people. Lauren Divine described the St Paul program aimed at reducing the number of uncut packing bands that end up in the environment. Andy Schroeder, of the Ocean Plastics Recovery Project, provided [written](#) and oral comment listing important aspects to consider in a marine debris plan for Alaska, and the need for active and coordinated effort. Mike LeVine noted that the problem of marine debris in Alaska is a great opportunity for partnership, and encouraged the Council to support and help facilitate marine debris awareness and efforts to address. He also noted that Ocean Conservancy is expanding their marine debris program in Alaska.

The Committee acknowledges that marine debris is a significant problem, and discussed what should be the role of the Council. While it is not specifically within the Council's authority, **the Committee recommends that the Council lend its platform as a venue to facilitate increased awareness and understanding of the marine debris efforts throughout the State, and support NOAA's development of a Marine Debris Action Plan for Alaska.** NOAA should reach out broadly to the seafood industry, through the Council as well as other venues. The Committee discussed the Council providing space for an evening workshop once the Council resumes meeting in-person, to include informational presentations about ongoing collection and reduction efforts, existing actions by the Alaska fishing fleet and communities, and also to solicit input about the goals for an Alaska plan and opportunities for partnership. As development of the Action Plan progresses, the Council may wish to receive periodic brief updates during the B reports.

The Committee also recommends that the science questions of marine debris be considered by the SSC in the Council's research prioritization process, to better understand the role and risks of plastics in ecosystem health and human health. NOAA might also consider a workshop at the Alaska Marine Science Symposium, to develop a research component for the Action Plan.

Northern fur seals

Mike Williams (NMFS Protected Resources Division) and Dr. Lauren Divine (Aleut Community of St Paul Island) provided a joint presentation on co-management activities over the past year, and proposed revisions to the Northern Fur Seal Conservation Plan's identification of conservation actions and initiatives. The Committee discussed the challenge of collecting data on fur seals other than the lactating females, and opportunities for getting international data. The Committee also noted the workload needed to accomplish these initiatives, and appreciated the contributions by a large team of agency staff at NMFS Regional Office, AFSC, and USFWS, with the Co-management Councils and staff on St Paul and St George, and widespread participation of members of those communities. There was no public comment.

The Committee commends NMFS and St Paul on the improved co-management partnership that is demonstrated both in the joint presentation as well as their ongoing process for revising the Conservation Plan. The Committee highlights this example of the relevance and usefulness of co-management and collaboration and its benefits for strategic planning, particularly including indigenous persons who live in the area in the management effort. The proposed Conservation Plan revisions are responsive to the Council's interests, and the Committee continues to see the value in regular presentations as a way to track the status of NFS for the Council. The Committee asks that the next presentation include the synthesis of recent studies on fur seals that is being developed for the revised Conservation Plan, as well as reflections on what the team has learned about long term trends, ongoing changes in the ocean, and fishing interactions that may be of interest to the Ecosystem Committee.

EFH 5-year review: update on model development

The Committee received two presentations under this agenda item: from Dr. Jodi Pirtle and Ned Laman, on the process underway for developing the 2022 EFH 5-year review for October, and the EFH distribution model changes that have been undertaken since 2017; and from John Olson, with an overview of the effects of fishing on EFH model and its methodology and planned improvements. The Committee clarified with the presenters how to understand the new maps based on modeled Level 3 EFH information (habitat-related vital rates), and how new maps were reviewed by the stock assessment authors. For the assessment of fishing effects, at the advice of the SSC, that model will continue to use the boundaries defined by the 95% Level 1 (distribution) and Level 2 (habitat density or abundance) data by species. The Committee also discussed the grid approach for extrapolating fishing effects (5km x 5km), the limited utility of the fishing effects model to assess localized impacts or unobserved mortality, and the fact that unobserved fishing is not included in the output. Committee members noted that in comparison to 2017, the fishing effects model output indicates higher habitat disturbance in the Bering Sea and Aleutian

Islands, though not in the GOA, which John explained is largely attributable to a coding error in 2017. It is most noticeable in the Bering Sea because of the larger volume of fully observed trawl fishing in that area, which was erroneously coded at a lower impact rate.

The Committee received [written](#) and oral public comment from Ben Enticknap (Oceana). He appreciated the ongoing progress with EFH analysis, and also expressed concern about protection of long-lived habitat features, especially in the GOA, and that the analysis underestimates those effects. He suggested several remedies for the 2022 review, as well as Council action to freeze the trawl footprint in the GOA.

The Committee valued the presentations, acknowledges the hard work and volume of new information developed by NMFS and the advances in EFH modeling, and appreciates the opportunity to provide interim input. The Committee is interested to receive a further interim presentation when new material is prepared for the SSC, currently planned for June 2022. Members of the Committee raised several areas for the EFH team to address in the 5-year review, either as changes to incorporate in the model, additional explanation for clarity, or focus topics for the next cycle of EFH research, and suggested that through this report, these also be provided to the SSC for consideration in their February 2022 review:

- Unobserved fishing data is not included in the fishing effects model; especially in the GOA, this is a large proportion of fishing effort. This seems a critical lack, and one that at least for vessels with VMS, seems possible to remedy.
- Are fixed gear (longline and pot) impacts on corals and sponges adequately factored into essential conservation measures, especially in areas of known concentration, and considering unobserved trips in the GOA and lack of VMS on some vessels/fisheries
- The fishing effects model appears to omit consideration for long-lived species (especially coral) occurring at depths of less than 300m; are there additional sources to access this information
- Fishing effects model output averages recovery rates among short- and long-lived species occurring within the same 25km² grid, which seems insufficiently informative for the needs of long-lived species
- How does/can the EFH review address shifting distributions, resulting from environmental and climate changes

Forage species review

Diana Evans briefed the Committee on a Council staff summary of recent research on forage fish ecology in the GOA and BSAI, and highlighted information from the SSC's December 2021 review of the Status of Forage Fish addendum to the BSAI SAFE report. Information from the Plan Teams and SSC indicate significant data gaps regarding forage species. In their report, the SSC supported the Plan Team's recommendation for a forage species workshop, including specific objectives. Dr. Olav Ormseth, forage fish author, and Dr. Diana Stram provided input to the discussion. There was no public comment.

The Committee recommends that the Council support the Plan Team organizing a public forage species workshop to better understand population estimates for forage species, their role in the ecosystem, importance to managed fishery resources and other components of the marine ecosystem, the potential impacts of climate change (including shifting distributions and their role as an indicator species), and how information on forage species is reported and available to relevant fishery management processes. The Committee emphasized the importance of forage species as a foundational component of the marine ecosystem, and believes that understanding the status and trends of forage species, including their role as ecosystem indicators, is crucial to effective EBFM. The Committee notes that there are many unknowns, and good data are lacking; as such, there are a lot of potential topics that could be included, and there was considerable discussion about how to keep the workshop focused. The Committee recommends that the workshop focus primarily on the quality and availability of forage species information. In subsequent steps after the workshop, the Council may consider whether management

responses should be considered. Jeremy Rusin, while supporting the workshop, also cautioned that the AFSC needs to balance any requests for new forage fish research in the context of limited resources and other basic ecosystem information that the Council needs in the long-term. The Committee understands the limitations on AFSC capabilities and resources but also stressed the importance of forage species as part of this necessary basic ecosystem information. The Committee hopes that the workshop can identify other sources of information (BASIS program, etc) that may assist in this effort. **The Committee recommends that the Plan Team expand participation by inviting the involvement of affected users, especially those reliant on the nearshore for subsistence and traditional harvest.** The Committee also hopes organizers will include other research entities (e.g., NPAFC, IPHC) who can provide value.

The SSC report also recommended including a discussion of the threshold for placing squid back in the fishery, as part of the workshop. The Committee noted the significant increase in bycatch levels for squid since they were placed in the ecosystem component. **The Committee supports the SSC's intent for the Council to track squid catch levels and evaluate management as part of the ecosystem component, but recommends that this topic not be included as part of the workshop.** The Committee discussed but was not able to resolve whether a review of squid bycatch and management has already been tasked.

Planning for second Council Ecosystem Workshop

Diana Evans presented the Ecosystem Committee subgroup's report on planning for a second ecosystem workshop. The subgroup consists of Bill Tweit, Stephanie Madsen, and Rose Fosdick, as well as Community Engagement Committee member Tom Panamaroff, who also contributed to the discussion at the Committee. The Ecosystem Committee was charged by the Council with exploring a follow-up to the Council's 2018 Ecosystem Workshop, and the subgroup met throughout 2021, and made progress articulating a draft theme, goals, and potential structure for the workshop (see Appendix 1 to the [subgroup's report](#)). While the workshop was originally planned for 2022, the subgroup proposed the Council postpone holding it this year due to COVID uncertainties about being able to hold it in-person, as well as some lessons learned from WPFMC to reframe it with a specific problem statement and perhaps in the context of a longer-term Council engagement effort. There was no public comment.

While the Committee continues to believe in the value and need for this type of workshop to get people with different interests and backgrounds on neutral ground to discuss the effects of climate change, **the Committee concurs with the subgroup's rationale to postpone holding a Council ecosystem workshop in 2022. Subject to Council approval, the Committee tasks the subgroup to consider ideas for reframing the workshop and revised timing, and prepare a proposal for Committee review in May and Council discussion in June 2022.** The Committee continues to support holding the workshop in conjunction with a Council meeting in Anchorage, and also supports the suggestion to add 1-2 more community voices to the planning subgroup. Over the course of the meeting, several potential focus topics for a workshop were mentioned, which the subgroup will consider.

Role/objectives of Ecosystem Committee

The Ecosystem Committee has been a standing committee for the Council since 1996, and was reconstituted in 2004 with a new membership and purpose (noting that many of its current members were appointed at that time). The membership reflects the role of the Committee to provide science-informed policy advice for the Council, rather than purely scientific advice on ecosystem issues, which comes through the SSC. The tasks of the Committee have varied over that time period, and as a standing committee, the Committee periodically takes the opportunity to reflect on its role, and whether the Committee continues to understand and meet the expectations of the Council. This is intended as an iterative dialogue with the Council, to ensure the Committee continues to serve a useful function.

Bill Tweit, Dave Fluharty, and Diana Evans set the stage for Committee discussion with an overview of the Committee's early history and tasking since 2004, as documented on the Committee's eAgenda. Over that time, the Committee has launched and overseen many innovative projects, such as the Council's

Ecosystem vision policy statement, the Fishery Ecosystem Plans, and the Alaska Marine Ecosystem Forum. Aaron Martin, the USFWS contact for the Council, provided comment about the USFWS interest in the Ecosystem Committee and opportunities to engage, and Nicole Kimball, speaking as one Council member and not for the Council as a whole, also contributed to the discussion.

The Committee agrees on two roles for the Committee. First, as with any Council committee, there are specific Council agenda items which the Council tasks to the Committee for intentional review or development. At the current time, those active tasks are oversight of the Bering Sea Fishery Ecosystem Plan and its taskforce work; review of EFH and habitat issues that are scheduled to come before the Council; and development of a second Council Ecosystem Workshop. The FEP and habitat work are recurring Council agenda items; the ecosystem workshop development is a discrete project.

Secondly, the Committee understands the Council to have designated a role for the Committee to provide a broad, ecosystem-focused perspective on issues on the horizon but which the Council is not actively engaged with. This is a different scope of tasking than that of other Council committees, but is appropriate for a standing committee such as the Ecosystem Committee, which has a broader remit. In this way, the Committee can help the Council be more efficient with its agenda time, while not losing track of important issues. Operationally, once the Committee alerts the Council to potential action, that action may or may not continue to be tracked by the Ecosystem Committee; the Council may assign those issues to other staff or advisory groups to resolve, or may choose not to engage. The Committee treads a delicate balance by providing advice and review of issues that the Council may not specifically have tasked, but which fit within this broad mandate, and it is the Committee's practice to work iteratively with the Council to raise issues and then get feedback on whether additional Committee time on the issue is useful, before proceeding further.

To clarify, here are two concrete illustrations of this second role. First, the Committee may track an issue through the longer-term, and be able to advise the Council when the situation changes such that Council action may be desirable. For example, the Committee, at the Council's behest, receives periodic presentations about northern fur seals and the conservation plan. At this stage, there are no acute concerns about fishery interactions that require Council involvement, but the Committee is able to take on the task of tracking that issue for the Council. Second, the Committee can highlight potential ecosystem concerns that it believes should be on the Council's radar, but currently are not. For example, the Committee received a presentation on marine debris at this meeting, to consider whether there should be a Council role, in response to Council tasking after events highlighted in the 2020 Ecosystem Status Report. Similarly, the Committee reviewed at this meeting the forage species issue after raising it to the Council, and will also review ongoing ecosystem initiatives in the GOA in March.

There was also discussion about other potential functions for the Committee. For example, beginning with the development of the BS Fishery Ecosystem Plan, the Committee has encouraged members of the public, and in particular those who are not as familiar with the Council process, to engage with the Committee on ecosystem concerns related to the Bering Sea and observations of environmental change. The Committee struggles with the right balance between on the one hand, making time for engagement and dialogue with the public, and staying in touch with ecosystem observations; and on the other, setting appropriate expectations about the limitations of the Committee's role as a conduit for concerns to the Council. This is an unresolved issue, and Council feedback would be welcome.

Committee members also raised a more targeted issue about the Committee's role in recognizing that people living and working in our ecosystem areas are part of our ecosystem approach, and what is the Committee's role in facilitating an active role for of indigenous people in research, monitoring, and management decisions, as many fishing industry persons working in our ecosystems already are. This is a larger question that the Council is also facing, and which the Council and the Ecosystem Committee have both taken steps to address in the Bering Sea, through the FEP LKTKS Taskforce work and also the Climate Change Taskforce. The Committee discussed the benefits of waiting on those taskforces to

complete their work, versus moving ahead to consider additional onramps for active participation. Some specific suggestions are for the Committee to seek input from indigenous people or rural communities, and to adjust its agenda or process so people who are actually living in the areas that are impacted by the topic co-present from both science and knowledge perspectives of their daily life. Committee members noted with appreciation the remarkable change in cooperation between NMFS and St Paul on northern fur seals from their first unsynchronized presentations to the Committee several years ago, to the coordinated and collaborative approach they gave at this meeting. It was highlighted that the Bering Sea FEP provides an access point for Bering Sea communities, but other ecosystem regions, such as the GOA, do not have the same benefit.

The Committee discussion was wide-ranging, and through the example of salmon bycatch and recent interactions of the tribes with the Council on salmon issues, members highlighted, without resolution, their different perspectives on: how the lack of opportunities for dialogue exacerbates conflict; ways to base conversation on shared facts and science; other venues for dialogue and problem solving outside of the Council process, and whether the Committee can/should facilitate increased collaboration among groups; whether the Committee should evaluate and track acute and long-term population trajectories in the ecosystem, the robustness of our management process to respond, and how those declines are experienced; and the ability of the Ecosystem Committee to provide a unique perspective that is different than discussions that are already happening among Plan Teams or other groups in the Council process. The Committee also discussed the role of climate and ecosystem change in the decline of crab stocks, and the increasing need for transboundary research and cooperation on monitoring with Russian counterparts.

The Committee provided a couple of specific suggestions moving forward. First, given the role of the Ecosystem Committee to provide a broad perspective on issues that are not necessarily on the Council's agenda, it may be difficult for the Council to absorb that information at the time this report is usually provided, at the end of the meeting in staff tasking. In conjunction with the Council's discussion of Council process changes in February, there may be some advantage to considering how to change the timing of the Ecosystem Committee report to the Council on these non-Council-action agenda issues.

Second, the Committee agrees with previous Council comments that it can be difficult sometimes for the public to identify at which group's meeting which aspect of Council issues are being discussed, and where they should spend their limited time to appropriately follow the issues they care about. One suggestion during the discussion was for the Ecosystem Committee to help staff pull together a tracking document – similar to the 3 meeting outlook but on a longer time scale – that tracks key Council initiatives (e.g. better understanding of the management system's resilience to climate change, incorporating local and traditional knowledge) and the ongoing Council, AFSC, national NMFS, and other initiatives that may be underway addressing those priorities, along with a timeframe for when check-ins with those initiatives will come to the Council.

The Committee requests feedback from the Council about whether it appropriately understands its primary roles; whether the Committee is providing value to the Council; whether the Committee is doing things that the Council does not find productive; and are there other ways the Committee can be more useful.

Other business

Alaska Fisheries Science Center's Strategic Science Plan

Jeremy Rusin updated the Committee on the recently-issued Strategic Science Plan that will govern the AFSC's work over the next 5 years. While there are a lot of similarities between this plan and the previous one, Jeremy highlighted the new organizational excellence section, that provides commitments about how the AFSC conducts its work. The document is primarily intended as a tool internally, to focus AFSC research and initiatives, but also serves to inform and provide transparency to the public. The Council will receive a more in-depth presentation on the plan at the upcoming February meeting.

The Committee appreciated the update, the information that the plan provides, and the willingness of AFSC leadership to engage with partners and the public. Members provided some immediate comments, and Jeremy encouraged Committee members as well as the public to reach out with specific feedback.

Future meetings

The Committee will meet virtually during the last week of March 2022 to review the FEP-related agenda items that are scheduled on the Council's April agenda item, including the ACLIM update. The Committee will also review the status of research initiatives taking place in the GOA and the timelines associated with those projects, tasked for the Committee at the June 2021 Council meeting.

The Committee will also meet during the last two weeks of May to review EFH 5-year review materials that are to be presented to the SSC, should that review stay on schedule, and consider a revised ecosystem workshop proposal for the Council.

The Committee also discussed the Council's February 2022 review of the groundfish management policy objectives from the PSEIS, and is interested to review information that may be prepared for a future Supplemental Information Report to evaluate how the changes and challenges of climate change are evaluated with respect to the groundfish management program, as appropriate at a future meeting.