COUNCIL COORDINATION COMMITTEE

HABITAT WORK GROUP

Report from
Council/NOAA Fisheries EFH Consultation and Regional Innovations Workshop

August 20-22, 2019

Portland, Oregon

Executive summary

Staff (or designee)[1] from each of the eight U.S. regional fishery management councils, the five regional offices of NOAA Fisheries, and select NOAA Fisheries headquarters staff with national habitat responsibilities met in Portland, Oregon for a three-day workshop held August 20-22, 2019. The purpose of the workshop was to advance our collective work toward effective essential fish habitat (EFH) consultations on non-fishing activities. This mission was accomplished by sharing current practices and challenges across regions and brainstorming ways to improve our collaborations with one another and outside partners in the future. At the conclusion of the workshop, each region developed the beginning of a work plan, with both short- and long-term opportunities for growth across the topics discussed.

In this context, consultations mean not only essential fish habitat consultations in a formal sense, as prescribed by the Magnuson Stevens Fishery Conservation and Management Act and led by NOAA Fisheries Habitat staff in each region, but also more informal involvement by both NOAA Fisheries and the councils in developing projects that may affect fish habitats and fisheries. Each council has a distinct approach to engaging in these types of projects, but we share many things in common, including limited staff and member time to address these issues and a desire to provide advice that is grounded in science. Among other activities, workshop participants agreed councils can amplify the conservation recommendations of NOAA Fisheries, and that the council process serves as a focal point for convening fishermen, managers, scientists, state and federal agencies, tribes, and conservation organizations.

Sessions

In advance of and during the workshop, council and NOAA Fisheries staff developed and facilitated sessions around eight themes. This report summarizes the content of each of these sessions, including major discussion points and potential action items.

1. **Introduction** of the workshop roadmap, bridge from the 2016 National EFH Summit, and a foundation for the remaining sessions.
2. **EFH consultation process** to describe how councils and regional offices communicate and collaborate.
3. **Habitat goals** and how their articulation can assist councils in effectively using EFH authorities.
4. **Council policy statements** to provide standing guidance for EFH consultation and habitat conservation efforts.
5. **Offshore marine planning and regional issue** coordination on a larger scale.
6. **Fishery science center engagement** in EFH consultation work.
7. **Tools and technology** to aid councils and regional offices in providing access to and use of EFH information in consultations.
8. **Obtaining and sharing data to refine EFH designations**, especially approaches and best practices.

[1] The Caribbean Fishery Management Council was represented by a member of the Scientific and Statistical Committee.

Major themes and discussion highlights

Different councils and regional offices (ROs) take different approaches to EFH consultation issues, which is appropriate given regional differences. This standing work group and specifically this workshop provide an opportunity to learn from one another, especially since many types of non-fishing projects that may impact EFH are common to multiple regions.

Everyone has limited staff resources to devote to these issues and thus needs to prioritize among habitat conservation initiatives. It is important to identify and leverage wider networks when developing expertise and conservation recommendations related to non-fishing projects. In terms of staff resources, there are tradeoffs between the ability to take quick action on a topic and the cost of maintaining regional expertise on specific issues.

Initial work to establish habitat-related goals and policies is one way to develop expertise on these issues that can be used to inform prioritization efforts. While time-intensive, such work can streamline commenting on specific projects. Effective goals are tiered, prioritized, specific, clearly articulated, and evaluated over time to ensure continued relevance. Habitat goals and policies are also an important external communication tool for partner agencies involved in permitting non-fishing projects. The goal and policy development process should include a plan for dissemination.

Ongoing communication between councils and ROs is beneficial. Building these relationships, including maintenance of communication channels between organizations and individual staff members, takes time, but regular communication will facilitate coordination when the councils are asked to or decide to engage in EFH consultation for specific non-fishing projects. Council policies around best conservation practices should be coordinated with NOAA staff to take advantage of their expertise and ensure consistency with their conservation recommendations.

Many of the issues discussed at this workshop are too large for one or a few staff to handle effectively and benefit from a coordinated group approach to tracking and analysis. While team approaches require additional resources to administer, they can lead to deeper fisheries engagement as well as more robust analyses and conservation recommendations. Groups outside NOAA and the councils, such as regional coalitions and planning groups, are important partners in terms of data sharing and research initiatives.

Although fishery science centers (FSCs) were not included directly in this workshop in an effort to limit meeting scope and size, relationship building between councils, ROs, and FSCs is very important. The importance of clear, two-way communication between managers and scientists should not be overlooked as a way to ensure that conservation recommendations are grounded in science, and research will benefit the consultation process. Strengthening these relationships will allow us to work more effectively on challenging issues together. One near-term opportunity for collaboration is to compare council and NOAA research priorities and plans to identify areas of alignment. In addition to more sophisticated research questions related to production values by habitat type or habitat suitability modeling, it is imperative to continue gathering basic presence/absence and relative abundance data across habitat types to inform the consultation process and other fishery management efforts. Many of these data-gathering efforts will require partnerships with states and research organizations.

Extensive time and energy has been invested in developing EFH information on the part of the councils, ROs, and FSCs, and a relatively small additional investment in communicating this information would greatly enhance its dissemination to outside partners. All councils and regions were able to identify areas for improvement, but there are many good examples of information products to draw from, which could be simple web-accessible documents, or more complex data portal initiatives. Information shared should include research priorities related to habitat.

Possible actions for the CCC

Workshop participants suggested two specific actions that the CCC itself could take to contribute to this area of work. First, the CCC could support coordinated outreach to action agencies. The goal of such outreach would be to remind action agencies of the important role that councils play as fishery management partners, as well as congressional mandates to address impacts on council-designated EFH. While NOAA Fisheries conducts EFH consultations, action agencies are encouraged to coordinate around actions that will impact EFH designated by the councils. Second, the CCC could identify habitat science priorities that are shared across regions and councils and communicate them to NOAA Fisheries leadership at both the ROs and FSCs. Shared science and research objectives can provide a foundation for work that could be done across FSCs and would benefit multiple councils and their habitat conservation initiatives.

Conclusions and next steps

Regional workshop participants and their colleagues have scoped work plans (contained in this report), and will initiate potential tasks identified during the workshop. Straightforward, near-term initiatives such as better communication of EFH information are already underway; other longer-term coordination work will require additional planning and organizational buy-in. During 2020 and beyond, the CCC Habitat Work Group intends to continue work on specific initiatives scoped at this workshop, under the guidance of the CCC, and to provide additional details and avenues for enhancing CCC outreach with partners and potential to identify shared habitat science priorities.

Table of contents

Abbreviations and acronyms

AKRO	Alaska Regional Office
BOEM	Bureau of Ocean Energy Management
CCC HWG	Council Coordination Committee Habitat Work Group
EBFM	Ecosystem Based Fisheries Management
ECO	Environmental Consultation Organizer
EFH	Essential Fish Habitat
FEP	Fishery Ecosystem Plan
FSC	Fishery Science Center
GARFO	Greater Atlantic Regional Fisheries Office
HAIP	Habitat Assessment Improvement Plan
HAPC	Habitat Area of Particular Concern
MAFMC	Mid-Atlantic Fishery Management Council
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEFMC	New England Fishery Management Council
NPFMC	North Pacific Fishery Management Council
OHC	NOAA Fisheries Office of Habitat Conservation
PFMC	Pacific Fishery Management Council
RO	Regional Office
S&T	NOAA Fisheries Office of Science and Technology
SAFMC	South Atlantic Fishery Management Council
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
USACE	U.S. Army Corps of Engineers
WCRO	West Coast Regional Office

Workshop purpose, objectives, and desired outcomes

Regional fishery management councils (councils) are congressionally mandated to conserve and manage fisheries, which depend on essential fish habitat (EFH) as part of a healthy ecosystem. The definition of essential fish habitat is provided in the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The councils are directed to consider, and have the authority to comment on, federal or state policies, permits, or other actions which in their view, potentially impact EFH. Given the statutory deadlines associated with these activities, councils coordinate on an ongoing basis with NOAA Fisheries regional office (RO) staff on EFH consultations. The overall goal of the workshop was to create a cross-regional forum for practitioners representing the councils and ROs to share best practices with respect to EFH consultations on non-fishing actions. During the workshop, participants did not limit discussions to formal EFH consultation and conservation recommendations, but instead took a broad view of potential approaches to collaboration around habitat concerns related to non-fishing activities.

The workshop was intended as a small working meeting for EFH practitioners (see Appendix 1 for a list of attendees). In addition to CCC Habitat Working Group (HWG) members, participants were selected because they are directly involved in EFH designation or consultation work. NOAA Fisheries headquarters staff working on science and policy topics that directly support EFH work also attended. CCC HWG members and other participants developed and facilitated the workshop sessions. Because this was a meeting of the CCC HWG, the specific focus was on practices within the councils' authority.

The CCC HWG acknowledged at the outset that there is no one-size-fits-all approach to EFH designation and consultation. Councils and ROs face different circumstances when it comes to understanding the habitat needs of their fishery species and the degree to which federal activities in a region have the potential to adversely impact EFH. This workshop provided a forum to compare best practices across regions, and allowed each region to identify ways to improve their own processes. The workshop provided an opportunity to evaluate the capabilities of other regions and tailor these ideas to make them work effectively and efficiently within each council's process.

Best practices and coordination around non-fishing impacts to EFH is a very large topic. To focus our work, the CCC HWG identified five **objectives** for the workshop in the preliminary plan for the meeting that was presented to the CCC in November 2018.

1. Fulfill recommendations from the EFH Summit that EFH practitioners should seek collaborations between regions and action agencies through better communication of key interests, and identify opportunities to share conservation approaches across regions.
2. Evaluate EFH designations as they relate to consultations on non-fishing impacts, considering whether their design is effective for use in non-fishing consultations.
3. Evaluate how best to make use of limited council staff and member attention on short time frames, while still providing meaningful consultation on issues of concern to the council.
4. Identify best practices for designating EFH at a fine-scale resolution that more closely matches the appropriate scale on which non-fishing federal activities are occurring.
5. Identify ways to provide more effective access to existing EFH spatial and habitat/species use information through online tools and capabilities. These tools are supported by the councils, NOAA Fisheries, and regional partner agencies for internal use by the councils and NOAA Fisheries and for external use by other federal agencies, States, or regional stakeholders. This collaboration would identify and connect existing capabilities and regional access to EFH information to enhance the council/NOAA Fisheries EFH consultation, permit and policy review processes.

The CCC HWG also identified the following potential **outcomes**:

- Compare processes to identify the level of council involvement needed on different issues, cases when it is sufficient to confer only with council staff, and cases when NOAA Fisheries can incorporate standing council guidance without additional coordination with the council. (Objectives 1 and 3)
- Identify effective coordination measures between regional staff, council staff, council bodies under constraining timelines. (Objectives 1 and 3)
- Discuss the implications of crafting a council policy statement to provide standing guidance for EFH consultations supporting efficient and timely council and NOAA Fisheries response. (Objectives 1 and 3)
- Discuss the use of technology to collect and share information that will enable more useful and detailed responses to questions or issues that arise in EFH consultation. (Objectives 1 and 5)
- Discuss defining and designating EFH to better support more effective localized responses and non-fishing consultations, such as through a regional EFH user guide. (Objectives 1, 2, and 4)

The section of this report on reflections and next steps summarizes the extent to which these objectives and outcomes were met during the workshop.

Session objectives and highlights

The workshop objectives were addressed through eight sessions. The purpose of and major takeaways from each session are summarized below. While there were opportunities for breakout discussions, all participants contributed to all sessions (i.e., none were concurrent). Some session leads identified questions for a partner survey, distributed prior to the workshop (see Appendix 3 for a summary of partner feedback). Survey recipients and respondents were from the Army Corps of Engineers (USACE), Bureau of Ocean Energy Management (BOEM), Navy, Federal Highway Administration, National Park Service, NOAA Fisheries, state agencies, and universities. In addition, background information for some of the sessions was obtained through a survey of participants and consultation partners (participants survey), where council staff and others summarized current policies and practices related to EFH consultation work. Questions and responses from both surveys are highlighted under relevant sessions below.

Session 1: Introduction

Ian Lundgren, Josh DeMello, Thomas Remington (rapporteur: Lisa Hollensead)

In 2016, NOAA Fisheries and the Fisheries Leadership and Sustainability Forum hosted the National Essential Fish Habitat Summit, which assembled council and NOAA Fisheries habitat managers and scientists to examine EFH implementation, share ideas and approaches across regions, and consider how the use of EFH authorities may respond to a changing environment. The findings and outcomes are reflected in the report from the summit (NOAA Technical Memo NMFS-OHC-August 2017).

The introductory session provided a contextual bridge from the 2016 EFH Summit, a "roadmap" for the workshop, and a foundation for subsequent sessions. Assuming participants arrived with a working knowledge of the EFH designation, consultation, and policy review processes, the introduction provided a high-level briefing of participants' roles in EFH designations, federal action and policy review, and EFH consultation. Furthermore, the session highlighted differences in workload, staffing, and collaboration approaches to demonstrate variability.

Discussion points, action items, and takeaways

Councils and NOAA Fisheries have a joint responsibility to define EFH for managed species, designate habitat areas of particular concern (HAPCs), minimize adverse effects on EFH from fishing impacts, and identify and minimize non-fishing impacts to EFH for managed fisheries, including anadromous fish. For non-fishing impacts, council comments are discretionary, except when pertaining to anadromous fish. NOAA Fisheries largely divides its role between its fishery science centers (FSCs), which generate science to support EFH designations, and ROs, which engage in EFH consultations. Councils often interact with NOAA Fisheries in non-linear ways as the designation and consultation processes are executed. While the designation process typically has tri-lateral involvement, non-fishing impact consultations have traditionally been less collaborative due to inherent differences dictated by ecology and commercial fishery targets, and to differences in how the EFH process is approached.

A brief overview of key consultation issues in various regions showed many similarities and some differences in the types of activities that result in consultation. Some activities are common throughout all regions, including energy development (fossil fuels and renewable energy), coastal development

(including docks and piers), and aquaculture. Other issues apply only to certain regions, including sand mining, beach nourishment, and reef restoration.

While each RO has substantial latitude to implement their EFH consultation program in a manner best suited to specific regional conditions (ecology, managed species life histories, climate, etc.), EFH consultations led by NOAA Fisheries are often influenced by logistical realities and action agency agendas. For example, in the Southeast region, coastal development and port expansion drive an abundance of EFH consultations, and the Southeast Regional Office currently receives approximately half of all EFH consultation requests nationwide. The variability in the number and complexity of activities that trigger consultations create uneven conditions between regions. Likewise, regions with the highest consultation requests also deal directly with more councils and USACE regulatory districts.

In order to deal with inequalities, regions with higher consultation loads tend to rely more on certain consultation tools than others. For example, east coast ROs rely more on general concurrences and programmatic consultations than other regions, or use findings to streamline consultation processes with action agencies. Some regions use HAPCs, a focused subset of EFH identified by the councils, to address a variety of conservation and protection challenges. HAPCs are used in various ways by the councils for fishery management. Within the EFH consultation process, HAPCs encourage increased scrutiny and more rigorous conservation recommendations to reduce adverse impacts to fish habitat.

Outcomes from this workshop will be useful as NOAA Fisheries embarks on a revision of EFH consultation guidance (expected in May 2020), which, when originally written, did not anticipate many present-day challenges. There is also an opportunity to incorporate regional issues into the guidance revision, including coordination processes that more fully engage councils on non-fishing EFH consultations.

Session 2: EFH consultation process: How councils and regional offices communicate and collaborate

Diana Evans, Jessica Coakley, John Stadler, Steve MacLean, Matt Eagleton (rapporteur: Josh DeMello)

Evaluation of the potential effects of non-fishing activities on EFH is a collaborative process between the councils and NOAA Fisheries. However, collaboration can vary by the type of activity being considered and by RO and council staff involved. This session sought to provide an overview of regional processes, techniques, and tools to engage partners in EFH consultations with the intent to identify best practices. Attendees discussed current practices and topics of joint importance for ROs, FSCs, and councils, including input from internal and external EFH partners (see Appendix 3), on when councils should and do become actively engaged in consultation, and how and whether there is an ongoing need for collaboration as a project proceeds.

Most councils have a single staffer to address habitat issues as one part of their overall responsibilities; the New England, Gulf of Mexico, and South Atlantic Councils each have at least a full-time habitat staff person. The amount of effort required may exceed one full-time equivalent for discrete periods, such as EFH reviews, HAPC reviews, and other habitat-related actions. Consultation with outside groups can be used to augment council staff resources. For example, state Coastal Zone Management offices have access to a variety of data and the support of state governors.

Attendees presented mini-case studies highlighting collaborations in different regions. John Olson (NOAA Fisheries Alaska RO) reported that depth stipulations/limitations were successfully reinserted into a gold mining permit in nearshore waters in Nome, Alaska, that overlapped with red king crab habitat. NOAA Fisheries and the North Pacific Fishery Management Council's (NPFMC) Crab Plan Team articulated concerns about the project leading to research funding to document at what depth adverse impacts to red king crab habitat were likely to occur. After review, the USACE reinserted depth criteria that had been removed from individual permits. Jennifer Gilden (Pacific Fishery Management Council, or PFMC) presented a case study in which the council's habitat goals were incorporated, through their Habitat Committee, into Pacific Marine Energy Center plans for an offshore energy test site, thereby avoiding impacts to an important rocky reef. John Stadler (NOAA Fisheries West Coast Regional Office) described the ongoing effort by the PFMC Habitat Committee to define criteria for the types of actions on which they would likely comment. NOAA Fisheries can then use these criteria to identify actions that are of interest to the council. Jessica Coakley (Mid-Atlantic Fishery Management Council (MAFMC)) highlighted a recent successful multi-agency collaborative effort to extend the comment period on an offshore energy project. Two councils (MAFMC and New England Fishery Management Council (NEFMC)) wrote letters requesting the extended comment period to allow their councils to review the projects. Council staff also sent letters to state governors' key staffers, identified by environmental non-governmental organizations, to ensure that the issue would rise to the governors' attention. After receiving multiple requests from a wide variety of stakeholders, BOEM extended the comment period, as requested.

Discussion points, action items, and takeaways

Attendees were asked to consider a number of questions about council engagement in EFH consultations for a group discussion: What is the value of council engagement? How useful is it for councils to be engaged? How do we add value to the council's engagement? Why should councils get involved?

Habitat goals and policies were discussed as solutions during this session, but these topics received more detailed consideration during sessions 3 and 4. Briefly, attendees recommended that councils should develop habitat goals and objectives to better communicate council habitat issues and priorities to NOAA Fisheries (see Session 3 summary). Also, attendees suggested that it would be useful for councils to develop policy statements that provide clear direction on which non-fishing activities the council wishes to engage, and articulate the council's standing comments on larger projects (see Session 4 summary).

What does council support for NOAA Fisheries consultations look like in practice? How do the councils add value to the consultation process?

Attendees generally agreed that council engagement in EFH consultations is valuable when the council comments are similar or the same as NOAA Fisheries comments. Councils often articulate concerns at a big-picture level and rely on NOAA Fisheries to make specific conservation recommendations. Even when the councils are echoing NOAA Fisheries' comments, it is powerful when both organizations speak with the same voice. Attendees noted that councils have the opportunity to write letters that are not bound by EFH consultation requirements to which NOAA Fisheries must adhere.

Councils are also a nexus for fishermen and fishery stakeholders. Because councils more directly represent commercial and recreational fishermen than NOAA Fisheries does, their comments can add

weight to agency comments and suggestions. In addition, councils may also consider impacts that the agency does not evaluate during EFH consultations (e.g., economic impacts), thereby adding information to the process that may resonate with business and development advocates. The council process can be used to share project information with, and bring perspectives from, these stakeholders, and is an opportunity to give feedback to action agencies about the social and economic impacts of a proposed action or habitat mitigation strategy.

It would be useful to track what happens when councils engage in EFH consultations, for instance determining whether council engagement influence outcomes. Attendees noted that collaboration comes at a cost, and there are limits on time and resources available for consultations. Tracking effectiveness would allow us to be smarter about how we prioritize our work.

What collaboration tools are most effective and what are some opportunities for improvement?

Attendees indicated that annual reporting from NOAA Fisheries to councils on the state of consultations, highlights, and predictions of upcoming issues can allow councils to strategically consider where they can engage. Appendix 2 includes for more detailed best practices for collaborating on EFH consultations.

Ways to achieve early intervention on projects when the timing doesn't overlap a council meeting

Councils can adopt policy statements with positions on particular activities to let action and consulting agencies know when councils wish to be engaged (see Session 4 summary). As an example, the South Atlantic Fishery Management Council (SAFMC) has both habitat type and activity-based statements that identify EFH for potentially impacted council-managed species, and conservation recommendations that can be cited by NOAA Fisheries or state/regional partners during or outside of the EFH consultation process. Councils can defer commenting to committees and/or staff, guided by goals and policy statements. Longer-term, the newly implemented Environmental Consultation Organizer (ECO) consultation tracking system may be useful for early intervention. Currently, councils can only view closed consultations through this public portal. However, the ability to view ongoing consultations may be added in the future.

Session 3: How can articulating habitat goals assist councils in effectively using EFH authorities?

Emily Farr, Jessica Coakley, Michelle Bachman, Diana Evans, Steve MacLean, Tauna Rankin (rapporteur: Michelle Bachman)

Habitat conservation goals can help councils and NOAA Fisheries prioritize activities, communicate with action agencies, and guide more deliberate use of EFH authorities. This session discussed what elements make an effective habitat goal, where those goals can be articulated, and how they can be used to guide management action. Several regional councils are moving toward proactive approaches to habitat conservation. Habitat goals are one tool to articulate priorities and encourage proactive thinking.

Each council articulates its habitat goals in a different way. Some are explicitly stated in fishery management plans, operating procedures, strategic plans, or habitat policies. Other goals are implicit, such as through research priorities or purpose statements associated with HAPC designations. Habitat goals also vary in their level of specificity, ranging from very general to more tactical and action-oriented.

The pre-workshop partner survey included several questions related to habitat goals. Most consultation partners agreed that habitat goals would facilitate coordination in the EFH process by helping action agencies improve EFH assessments, minimize impacts on priority areas, identify research priorities, and better understand NOAA Fisheries conservation recommendations. A few examples were given where habitat goals have been useful, including in developing regional conditions for the Army Corps nationwide permit program, and by communicating priority areas through the designation of HAPCs.

Discussion points, action items, and takeaways

What is the value in setting habitat goals, and for what audience?

Participants agreed that habitat goals add value to the EFH process. For the councils, habitat goals can help focus activities and inform decisions for specific areas or habitat types. They can also serve as a communication tool for the regulated community, and influence management actions beyond the jurisdiction of the council or NOAA Fisheries. Action agencies and developers that are engaged in projects with non-fishing impacts on EFH may not be thinking about the role of habitat in fisheries, and habitat goals help express the need for conservation measures that support healthy fisheries and economies. Consequently, habitat goals may affect the outcomes of consultations through early coordination to reduce impacts. Council goals for habitat conservation may also help influence management actions beyond the jurisdiction of the council or NOAA Fisheries through coordination with regional partnerships, associations, or planning bodies. NOAA could also use these types of goals to prioritize its restoration and conservation activities and grant opportunities.

What makes an effective habitat goal?

Effective habitat goals are tiered, prioritized, and specific. A tiered approach would include high-level goals across all species and habitats, specific goals built into fishery management plans or other management structures, and more detailed actions attached to those goals. An example of a high-level goal came from NEFMC: “Maintain and enhance the current quantity and quality of habitats supporting harvested species, including their prey base.” Goals are likely to be more effective when they are closely tied to council priorities; for example, ecosystem protection, fish stock recovery and sustainability, or improved fisheries economics. Participants agreed that HAPCs are most effective when they have specific goals associated with their designation. One example provided was the Tilefish HAPC in the Mid-Atlantic, which was developed to meet the specific goal of protecting vulnerable pueblo habitats from fishing gear impacts. In addition to being tiered, prioritized, and specific, habitat goals should be clearly articulated to the proper audience, and actionable. Finally, goals should be critically evaluated and tested over time to ensure continued relevance.

How do we measure what degree of habitat protection is sufficient to meet habitat goals?

Measuring progress and determining the degree of protection needed to meet habitat and fishery management goals remains a challenge. For most species, information linking habitat to fish productivity is unavailable, and environmental change makes decisions about how much habitat protection is needed to meet fishery management goals into a moving target. However, it is important to set habitat goals that help buffer against this uncertainty and refine them to include more quantitative information as it becomes available. An indicator-based approach that uses available information (e.g., the size distribution of a species) as a proxy for habitat quality or quantity was suggested as one possible strategy for measuring the success of habitat protection. PFMC provided an example of a measurable goal: “there should be no net loss of the productive capacity of marine, estuarine, and freshwater habitats that sustain commercial, recreational, and tribal salmon fisheries beneficial to the nation.” Participants agreed that the concept of “no net loss” is clear, simple, and effective.

Session 4: Council policy statements to provide standing guidance for EFH consultation and habitat conservation efforts

Michelle Bachman, Diana Evans, Steve MacLean (rapporteur: Diana Evans)

Policy statements are an opportunity for councils to articulate their views on habitat management, including concerns about non-fishing activities that may affect fish habitats, in a clear, outward-facing, and easily shareable manner. In this context, policy statements refer to evidence-based best practices for habitat conservation, values-based statements about the desire for habitat protection, and statements of operational policies that structure the mechanisms for council engagement in habitat conservation efforts. Done effectively, these policies can benefit both council and NOAA staff engaged in habitat conservation work. This session explored the processes used to generate these policies, the content and language included in these policies, and how these policies are used (or not used). The goal was to identify areas for improvement and begin to create a tool kit of ideas that can be used to refine existing policies or create new ones.

Questions around awareness about and usage of council policy statements were part of the pre-workshop partner survey and informed the discussion (see Appendix 3 for a summary). As a case study, MAFMC discussed their efforts to develop a series of policy statements.

Discussion points, action items, and takeaways

Are policy statements useful?

Among the external partners surveyed prior to the workshop that were aware of council habitat policies, many agreed that they were useful, or could perhaps be useful. Similar to the discussion around habitat goals, partners felt that council policy statements could be used to bolster decisions or recommendations on projects or permits affecting fish habitats. Partners suggested that statements should be specific, focused, clear, and concise; and that councils should collaborate with NOAA Fisheries on content to create consistency between NOAA Fisheries and council conservation recommendations. Workshop attendees agreed that statements should be clear and concise.

Development approaches

The MAFMC policy statement process considered an array of non-fishing activities, with the topics actually developed winnowed from a longer list of potential issues. Consultant-developed background materials and subject matter experts were used to educate council members about the activities and their effects on habitat. A small technical team drafted the initial statements, which were vetted by experts before being provided to the council for further editing and approval. During the approval process, the council discussed how to use the statements to streamline the development of comments on specific projects. Overall the process took about two years. SAFMC completed similar work before MAFMC. One difference between the two councils is that SAFMC subject matter experts tend to be integrated with their council process on an ongoing basis via advisory panel membership, vs. through as-needed participation in specific meetings for MAFMC. The NPFMC has taken a similar approach to developing conservation recommendations for the non-fishing impacts appendices to their fishery management plans. In practice, some of these conservation recommendations have been built into projects from the beginning, which has allowed them to avoid making those suggestions during the EFH consultation process.

The group discussed specific process approaches, which will be detailed further in the toolkit, but generally considered who was involved in the process of policy development, and when. For example, you could begin the writing process with staff, and then solicit subject matter expert review, or start with best practices drafted by individuals working in the field. Early council buy-in and feedback was felt to be important; the utility of Scientific and Statistical Committee review was discussed. Attendees also noted the issue of institutional memory and the possible need for ongoing education about these non-fishing issues, given that council members, staff, and others rotate out of the system. However, continuing education takes time and resources.

Scientific underpinnings and uncertainty

The overarching premise behind these policies is that habitat conservation actions benefit managed species productivity. There was agreement about the need for conservation recommendations to be evidence-based. Although there will always be questions about whether and how much a given conservation action benefits a particular stock, particularly under changing environmental conditions, these questions don't invalidate the council's habitat goals and policies as precautionary guidance intended to buffer against uncertainty. It seems important to communicate areas of uncertainty and needs for additional scientific study when writing policy statements. Documenting past negative impacts of projects on fishery resources also seemed important as a means of underscoring the need for conservation recommendations.

Outreach and communication

After these types of conservation recommendations are developed, it is important to have a plan for dissemination. The results of the partner survey indicated mixed awareness of council policy statements, which suggests a need for better communication with external partners about their existence. North Pacific NOAA Fisheries attendees noted that they deliberately communicate changes to their conservation recommendations whenever updates occur. Policy statements originating from NPFMC could be a useful complement to these documents. Greater Atlantic NOAA Fisheries staff do similar outreach, particularly when agencies responsible for these non-fishing projects get new staff. Outreach about conservation recommendations and related council policies at fishery science centers could be useful. Current engagement with FSCs is mixed. A challenge here can be a lack of alignment between these specific conservation topics and individual FSC staff work plans.

Session 5: Offshore marine planning and regional issues

Jessica Coakley, Michelle Bachman, David Dale, John Stadler (rapporteur: Diana Evans)

The session discussed ongoing and potential regional practices and approaches to coordinate on large-scale activities occurring in the region's offshore space such as offshore wind, oil and gas development, aquaculture, and marine spatial planning. This coordination occurs among councils, ROs, and FSCs in the context of habitat protection and EFH consultation, although other issues such as impacts to fisheries operations or protected species are often considered as well. The discussion was focused around how these groups intersect and coordinate on cross-cutting and region-wide issues and what practices may be useful for enhancing the council's contributions to the consultation process, either directly or indirectly, with limited availability of time and resources for all involved. This session discussed the benefits of coordinated tracking of these major activities among the councils and their NOAA Fisheries partners.

Offshore wind in the northeast region was examined as a case study. This is a major activity that requires input from multiple councils, federal agencies, and stakeholder groups, and encompasses multiple long-term projects.

Discussion points, action items, and takeaways

Regional coordination through internal and external groups

The pre-workshop survey of regional habitat expertise indicated that 46% of those surveyed coordinate within their region on cross-regional issues, with common topics including energy development, naval issues, and programmatic consultations. The Northeast Wind Energy Team, a collaboration among staff from the NOAA Fisheries RO and FSC, and two councils, was presented as a case study for how to tackle cross-regional issues. Some of the benefits of the Wind Team include shared resources and information (including a joint council-hosted webpage), the ability to track issues that would otherwise overwhelm an individual organization or staff person, and the development of better scientific and technical products to inform comments on these activities/projects. The team does, however, require a big investment in time and effort for coordination through monthly calls, calls in between, and many more "cooks in the kitchen" developing technical products and comments on projects.

Workshop participants also discussed how they coordinate on regional activities such as aquaculture, energy development, and ocean planning. The roles of the previous regional planning bodies, and state-organized groups such as the Northeast Regional Ocean Council (NROC) and Mid-Atlantic Regional Ocean Council (MARCO) (which support data portals), and regional coalitions such as the Responsible Offshore Development Alliance and Responsible Offshore Science Alliance were considered.

Councils as a source of information

The participants identified a strong role for councils in helping collect and disseminate information at a broad scale. This information can be used by those commenting on the specifics of projects and by fishery stakeholders who may wish to engage in the process. For example, SAFMC has a data portal on its website and uses a regional Habitat and Ecosystem Advisory Panel to guide habitat conservation and ecosystem-based management activities and policy development. Councils can help identify information needed to understand an issue so stakeholders can engage more productively (e.g., council contributions to NROC and MARCO ocean planning portals). Councils are an important venue for information sharing among stakeholders about upcoming comment opportunities, for example by circulating requests for information and sharing how and when to engage on non-fishing projects within the region.

Need for advanced planning

For complex issues, there is a need to have both personnel and learning in place before these issues emerge, as once these projects start, they can happen fast. For example, Northeast offshore wind was described as "trying to fly a plane while we are building it." The challenges of learning about new developments in technology and non-fishing issues emerging within a region can be substantial. Related to this, continuous relationship-building is key, so that emerging issues can be anticipated and the expertise needed on these topics is easily identified. Early engagement needs to be balanced with the potential for meeting fatigue, particularly if there isn't a focal project to dig into. Some emerging issues may take years before they come to fruition, if they do at all.

Potential role of the CCC

There is a potential role for CCC to help clarify with other federal agencies that councils, as major partners in managing fisheries, need to be part of the EFH consultation process. In addition, planned outreach through the CCC on the role of the councils could be considered to groups such as the Navy, USACE, or other national-level agencies or organizations that might not be fully aware of the councils or their role.

Session 6: Fishery science center engagement in EFH consultation work

Margaret (Peg) Brady, Tony Marshak (rapporteur: Jennifer Gilden)

The objective of this session was to identify short and long-term recommendations to improve coordination between FSCs, councils, and ROs regarding EFH. FSCs work to understand and document the critical roles that habitat plays in supporting marine species, and provide managers with the information they need to manage our nation's marine species. FSCs conduct habitat research and provide technical support to ROs and councils as they conduct EFH consultations. The FSCs also conduct habitat assessments that provide a collection of information about a species in relation to its environment, including products like maps and status and condition reports. The NOAA Habitat Science Story Map provides an overview of the habitat research work conducted by the FSCs.

Two key findings from the 2016 EFH Summit report that focus on habitat science to support management include the following:

- NOAA Fisheries and partners need to address habitat science gaps and improved coordination among scientists and managers.
- EFH practitioners, including scientists, managers, and consultation staff, need to build a community of practice, maintain communications, and develop effective working relationships.

In 2018, NOAA Fisheries updated the 2010 Habitat Assessment Improvement Plan (HAIP) in the context of the 2016 Ecosystem-based Fisheries Management Policy and Roadmap. The HAIP II plan identified the following recommendations: improve additional stock assessments, refine EFH designations, inform ongoing ecosystem-based fisheries management (EBFM) implementation and address remaining gaps and emerging habitat science needs with respect to the 2016 EBFM Policy and Road Map.

To gauge the current level of engagement among these parties around EFH, a brief questionnaire was distributed to the FSCs, ROs and councils prior to this workshop. The responses from the questionnaire were shared and discussed during this session.

Discussion points, action items, and takeaways

Opportunities to improve engagement include enhanced communication, joint meetings, and shared understanding of needs/priority setting, for example:

- Distribute a list of habitat contacts at FSCs, ROs, councils to build relationships. FSC contacts were provided during the workshop.
- Conduct council EFH briefings for FSCs to illustrate where science and management intersect, as well as challenges in using existing data.
- Share examples of how habitat science information improved consultations and ensured positive outcomes (e.g., how habitat information was used in assessments; Tony Marshak and John Olson noted examples).

- Identify habitat and ecosystem experts to join council regional plan teams or advisory committees.

Longer-term recommendations include the following:

- Improve FSC understanding of scope/timeliness of EFH consultation requirements; create opportunities through cross-regional teams (e.g., wind energy); set joint habitat priorities so that research matches management needs.
- Gather regional input on national science initiatives to improve alignment with regional priorities.
- Seek to review and provide comments on regional strategic plans developed by ROs and FSCs, and understand how those priorities feed into work plans. Identify funding opportunities that might be available for councils (noting their funding restrictions).
- Ensure that new staff are up to speed on habitat science priorities. Ensure that staff are aware of the councils' research and data needs documents or websites.

The potential role for the CCC

It would be useful for the CCC to identify regional habitat science priorities and share them with NOAA Fisheries leadership at both the ROs and FSCs.

Session 7: Tools and technology to aid councils and regional offices in providing access to and use of EFH information in consultations

Roger Pugliese, Reni Garcia (rapporteur: Kerry Griffin)

The session was designed to provide councils with examples of regional online systems, tools or visual presentation technology that would enhance access to and use of EFH designations, supporting information, spatial representations, and council policy guidance used to address impacts associated with non-fishing activities.

In advance of the session all regions provided input which supported the session breakout. The session included a review and discussion of the existing council and regional online capabilities for distributing habitat and ecosystem information supporting the EFH consultation process. This was done to evaluate the potential to provide councils/regions more effective access to existing EFH spatial and habitat/species use information and highlight other technologies available to collect and share information that will enable more useful and detailed responses to questions or issues that arise in EFH consultation.

Breakout groups provided cross-region discussion on the following areas: 1) EFH Designations; 2) Habitat and Species Information; 3) EFH and HAPC geographic information systems (GIS); 4) Habitat Policies; and 5) Research Needs and Tools. The groups were guided to identify various distribution methods employed, target audience, needs to be addressed and/or processes supported, and to identify capabilities reviewed which may enhance council and regional ability to address impacts of non-fishing activities on EFH.

Discussion points, action items, and takeaways

EFH designation information should be readily available

The group agreed that EFH designations should be easy to find, with links provided on council habitat pages and NOAA Fisheries EFH consultation pages, and including a council summary document listing all designations. In addition, each council should have a document or single area of its website for all of the materials related to EFH designation. A regional EFH user guide could be developed as a collaboration with the NOAA Fisheries. For example, the Southeast Regional Office (SERO) developed such a document to present all council designations, clarify designation uncertainties in the consultation process, and link to associated map products. NOAA Fisheries Greater Atlantic Regional Office (GARFO) is in the process of updating an EFH assessment worksheet to assist permit applicants and action agencies with effects analysis and help NOAA Fisheries gather the information needed for their new tracking system.

Habitat/species information

Many regions have buried habitat species information in their fishery management plans and analyses, which can make the information difficult to find. NOAA Fisheries Alaska Region's page is an example of a well-organized site that includes EFH descriptions, amendments, maps, consultation resources, habitat assessments, HAPC regulations and other resources all on a single page. Another variation is the SAFMC Fishery Ecosystem Plan (FEP) II Dashboard, which includes access to all habitat, EFH and EBFM information, web services, and other tools through one location. The Northwest Fishery Science Center Fishery Resource Analysis and Monitoring Data Warehouse has information on the substrate and fishing effort used in the analysis of changes to bottom trawl closures in Amendment 28 to the Pacific Coast Groundfish Fishery Management Plan. Information on habitat suitability probability modeling for many of the 92 species in the Plan will be available soon. These pages might serve as models for other regions, or there may be value in building a national information system with all EFH designations.

Other recommendations include the following:

- Develop fact sheets on EFH for each species and make available through council websites.
- Support outreach and education about what EFH and HAPCs mean for other state and federal action agencies.
- Develop or support regional interactive data portals or web services that provide the ability to view all EFH and map creation functions, including the ability to drop a pin or draw a polygon or overlay other information to tell a specific story.
- Include new information on thresholds for impacts as developed (e.g., tolerance limits of species to suspended sediment).
- Councils should aim to map EFH/HAPC for the full range of the species.

EFH and HAPC GIS and Mapping Portals

Mapping portals should address the needs of their target audience, particularly action agencies or consultants who are submitting a project for EFH consultation, project developers who are researching potential habitat implication of their project, council analysts looking for how EFH may be affected by a potential council management measure change, and NOAA Fisheries staff evaluating areas for restoration or other assessments. The National EFH Mapper provides spatial information from all the regions, and some councils have their own mapping portals with information that is more up-to-date. A

new consultation tracking system, ECO, was just released (see Session 2 summary) and may be upgraded in the future to include GIS capability.

NOAA Fisheries may be less nimble with frequently updating regionally-specific information online than councils, so councils should consider how to make their websites more informative to get timely information out. Councils may consider working with state and regional partners to share data across systems. To enhance collaboration and support enhancement, councils can also work with the NOAA Fisheries Office of Science and Technology as relevant.

Suggestions to improve the presentation of spatial data include the following:

- Council websites should be structured to enhance access to spatial information, and consider new presentation formats such as ESRI Story Maps.
- Make sure all councils have a spatial representation of EFH, HAPCs, and related information available for review and download online (e.g., web services) in multiple formats including shapefiles, or point to the National EFH Mapper and the NOAA Fisheries Office of Habitat Conservation's EFH data inventory website.
- Include fishery closure areas on EFH maps, with an explanation for why each area is closed (e.g., habitat protection).
- Focus on how constituents could use the websites. Ongoing coordination could include a technology transfer from the North Pacific and South Atlantic Councils to others with less refined web content in terms of spatial data.
- Web services can expand the capability to include representative photos and videos of various habitat types or species using habitat (e.g., SAFMC Managed Area Service in the SAFMC Digital Dashboard).

A spatially explicit evaluation "tool" at ROs or councils to assess non-fishing effects, in a similar manner as for fishing practices (fishing effects model used in the North Pacific and Northeast), has not yet been developed. However, one example for Alaskan waters is *Geospatial Datasets Applicable to an Essential Fish Habitat Non-fishing Vulnerability Assessment: Norton Sound, Alaska, Dr. Chris Maio, June 30, 2015. https://drive.google.com/file/d/11AD9Pn-KaM_AbZzxiNCTlAqnE291ZZxb/view?usp=sharing*

Habitat Policies

Building on the dedicated habitat policies session, the group discussed how those policies can be applied and disseminated. Councils who develop EFH policies or policy statements should make them accessible online for review and download to enhance their use by NOAA Fisheries, state and federal action agencies and regional partners. Council staff could directly use those policies in comment letters, and NOAA Fisheries consulting biologists and state/regional partners could easily draw on and incorporate approved council policies into their recommendations or justifications.

Research Needs

NPFMC's Alaska Fisheries Information Network (see www.research.psmfc.org) was provided as an example of a searchable online database of data needs targeted at researchers and research funders. Participants agreed that this was a good model, and NPFMC will look into sharing the architecture of the database for other regions to implement. Having council research priorities easily accessible and all in one place (e.g., housed on CCC webpage) would enhance collaboration among researchers, help communicate needs to FSCs, and help track progress towards habitat goals and strategic plans. In

addition, the database of research priorities could link to existing spatial systems, or be tailored to address other regional priorities (e.g., habitat, EBFM needs articulated in FEPs). Councils should ensure habitat and ecosystem research priorities are developed and highlighted in standing prioritization processes, and should strive to engage other regional partners (NOAA Cooperative Institutes, Sea Grant, Ocean Observing Associations, Regional Habitat Partnerships, etc.) to help refine priorities and link them to habitat and ecosystem goals.

Session 8: Approaches and best practices for obtaining and sharing data to refine EFH designations

Lisa Hollensead, Karen Greene, Roger Pugliese (rapporteur: Jessica Coakley)

The purpose of this session was to discuss EFH data collection, management, sharing, and utility for designation. Additionally, the council and RO participants had an opportunity to identify challenges in the data gathering and analysis process and were encouraged to provide potential solutions for these challenges. The goal of the session was to provide an opportunity for participants to synthesize approaches for efficient scientific data collection used to inform EFH designation.

The pre-workshop participants survey gauged how councils obtain, store, and share habitat data. Results indicated that FSCs are relied on heavily for both habitat data collection and management. During the workshop, participants discussed the questions outlined in the session vision.

Discussion points, action items, and takeaways

The session provided a unique opportunity for regional council and RO staff to share experiences with data collection and identify challenges to addressing data needs. These issues are often complicated and confounded by regional-specific effects; however, a few common themes were identified across regions. Effective data collection requires close collaboration with a wide variety of scientific partners. In particular, there is a need to work more closely with partners on nearshore habitats. Additionally, continued robust collection of level 1 and 2 information (presence/absence and relative abundance data) is imperative for describing potential changes in fish habitat use over time and constructing more complex (i.e., ecosystem-based) spatial models. The group agreed that discussions at a future meeting could be focus on spatial modeling approaches and identifying data needs for EFH delineation.

What types of spatial data are collected in the different management regions? How are spatial data collected, stored, and shared with other partners?

According to the pre-workshop survey, councils rely heavily on FSCs and ROs for habitat data collection and storage. Additionally, academic institutions and non-governmental organizations also aid in data collection and habitat analyses. The group agreed that it is important to involve diverse partners in habitat data collection as different projects have different data requirements.

How are data used to inform EFH designation? How do EFH outputs translate as management tools? What to do when different spatial analyses give different EFH designation results?

The group stated that refining level 1 and 2 data collection is important for designating EFH. From these data sets, a variety of spatial modeling approaches, such as habitat suitability index models and generalized additive models, can be used to inform EFH delineation. Additionally, it is important to collect basic fish population distribution information, as several managed species have been observed expanding or shifting from their historic ranges. These range shifts may be associated with broader

global climate change effects and should continue to be monitored by fisheries managers for implications to EFH.

How to deal with broad EFH designations?

In regards to EFH consultations incorporating the uncertainty associated with species distributions, the group stated it was better to be overinclusive to account for the possibility of habitat use by a number of species. Broadly, there was agreement that protecting what has already been designated and maintaining current conservation areas is a high priority. In addition, broader designations are still effective if finer resolution mapping and more detailed characterization of habitat are conducted during the EFH consultation process.

Are EFH designations effective for use in non-fishing consultations?

The group recognized that improvements could be made to better collect nearshore data (i.e., from state partners) which can inform the creation of habitat conservation plans associated with energy development and exploration.

What is the future for EFH data collection?

EBFM approaches are seeing more utility in fisheries planning. Ecosystem models are increasingly able to handle direct inputs of habitat information. While these new models are still being developed for stock assessments, it is beneficial to continue and expand data collection programs that will support future ecosystem-based models.

Potential regional future work

Participants were tasked with scoping ideas and next steps for their respective regions, including a list of potential actions, a rough sense of timing, and who might need to be involved. The intent was that these staff-level plans would be a starting point for action, and attendees would coordinate with others in their regions, including their councils. Workshop attendees recognized throughout the workshop and during this planning exercise that each region is unique and solutions will vary.

New England and Mid-Atlantic Councils

Greater Atlantic region participants Jessica Coakley, Michelle Bachman, and Karen Greene discussed simpler/short-term and more intensive/longer-term strategies for coordination and communication, both among the councils and NOAA Fisheries, and with outside stakeholders involved in EFH consultations.

As discussed in the session on access to **EFH information**, both the councils and GARFO can better disseminate EFH information on their webpages.

- Add informational content about EFH designations and the consultation process to sites, engaging communications staff.
- Ensure the three websites are accurately linked to each other.
- For councils, post lists of types of projects we have asked GARFO to communicate with councils on, and related comment letters.
- For GARFO, include information about coordination with the councils on their site.

As a next step, work together to highlight some successes in terms of conservation outcomes, effective collaboration between councils and NOAA Fisheries, or both. This outreach could be regional as well as national and should engage the NOAA Fisheries Office of Science and Technology (S&T). GARFO is also planning an EFH user guide.

Related to the **habitat policies** session, councils can enhance existing policies, develop new ones, and better coordinate around shared conservation recommendations embedded in the policies.

- MAFMC developed a range of habitat policies in 2016; no major updates are planned.
- NEFMC is considering new habitat policies, which may expand upon the range of topics addressed by MAFMC.
- GARFO can make sure that staff are aware of and using the policies during EFH consultation work.

In terms of identifying shared objectives and longer-term planning, the northeast team discussed consolidating goals, objectives, policies, and habitat-related research priorities for the region in one place.

- Consider how to make these lists searchable/accessible.
- Identify shared priorities.
- Crosswalk to identify links between these and national/regional strategic plans.
- Consider whether this might step us toward a regional strategic plan for habitat activities.

- Consider forming a workgroup of council, GARFO, and NEFSC staff for this review and longer-term planning.

South Atlantic Council

Timeline for action

- Sept 2019: Provided an update on the CCC HWG workshop during the Habitat Protection and Ecosystem Based Management Committee and South Atlantic Council meeting.
- Oct 2019: Will provide an update on the CCC HWG workshop during the October Habitat Protection and Ecosystem Based Management Advisory Panel meeting.
- Plan to send the final workshop report to the Habitat and Ecosystem Advisory Panel and Committee once prepared for November CCC meeting.
- April 2020: At the spring Habitat and Ecosystem Advisory Panel meeting, review the workshop report and identify potential opportunities for improvement of council response to non-fishing activities impacting EFH and enhanced council-RO coordination on EFH and habitat issues.
- June 2020: Review the Habitat and Ecosystem Advisory Panel recommendations on the workshop report and potential opportunities for improvement of council response to non-fishing activities impacting EFH and enhanced council-RO coordination on EFH and habitat issues.

List of potential opportunities for improving coordination on EFH and habitat issues

1. Refine council habitat and ecosystem page and FEP II dashboard and web services. Use of story maps and other technology to guide access to and use of information clarifying council's EFH designations, policies and conservation and management actions supported by the South Atlantic FEP II Implementation Plan.
2. Refine communication between SERO/SEFSC and council/council staff on EFH consultations and information supporting them.
3. Review habitat science component of NOAA Fisheries Southeast Region Geographic Strategic Plan.
4. Habitat and Ecosystem Advisory Panel discuss long-term habitat goals as they relate to or are integrated into the FEP II Implementation Plan.
5. Habitat and Ecosystem Advisory Panel October 2019 Meeting Activities and guidance supporting refined habitat conservation and EBFM in the South Atlantic region.
    a. NOAA Fisheries EBFM activities for the South Atlantic region: deliverables supporting the FEP II Two Year Roadmap, including the South Atlantic Ecosystem Status Report and South Atlantic Climate Vulnerability Analysis.
    b. Update on Kitty Hawk wind project area research and development activities.
    c. Draft environmental impact statement for the Florida Keys National Marine Sanctuary marine zoning and regulatory review.

d. Council ecosystem considerations: prey supporting dolphin wahoo fisheries in the form of bullet and frigate mackerel as ecosystem component species to the Dolphin Wahoo Fishery Management Plan.

e. Update on the development of next generation Ecopath with Ecosim model.

f. Mapping/characterization of South Atlantic deepwater ecosystems: DEEP SEARCH 2019 expeditions on NOAA Ships *Ron Brown* and *Okeanos Explorer* in the South Atlantic.

g. Fishery-independent research in the South Atlantic region: update on the Southeast Reef Fish Survey.

h. Guidance on SAFMC Citizen Science Program research prioritization.

i. State Panel breakout session: FEP II Roadmap and state activities associated with climate change and extreme event planning. Potential future addendum to the council's climate policy statement.

j. State panel session: report creation using Ecospecies and SAFMC/Fish and Wildlife Research Institute web services.

5. Refine SAFMC/NOAA Fisheries EFH User Guide.

Caribbean Council

The Caribbean Fishery Management Council (CFMC) works in close association with SERO with respect to all consultation projects regarding EFH, including both fishery and non-fishery related proposals. The CFMC is working with NOAA, academicians, consultants, NGOs, and stakeholders to develop ecosystem conceptual models for an EBFM-FEP. Broad consultation with stakeholders will benefit this process and will be an essential part of EBFM. Outreach and education efforts are underway to familiarize the public with local marine ecosystems and to help determine the non-fishing impacts to EFH.

An action plan is ongoing and based on the development of the ecosystem-based approach to fishery management that could improve the CFMC/NMFS collaborations regarding EFH consultation projects includes the following.

1. Definition and mapping of EFH distributions within the Caribbean US-EEZ.
    a. Data mining of paper maps results in the georeferencing of useful habitat maps.
    b. Development of story maps depicting the commercial reported landings is expected to guide future habitat research.
2. Continued collaboration with NOAA's Biogeography Group, Office of Ocean Exploration and Research, Coral Reef Conservation Program, and others for multibeam mapping in HAPCs within the US Caribbean EEZ, prioritizing the mesophotic reef zones that serve as seasonal spawning aggregation sites for a variety of federally managed commercially important fish and shellfish species and areas of high ecological value due to live coral resources.
3. Production of benthic habitat maps and biological characterizations of sessile-benthic (coral, sponge, algae, others), fish, and shellfish communities associated with HAPCs (species-habitat data) within the upper mesophotic depth range (30-50m).

4. Pilot studies using autonomous underwater vehicles and remotely operated vehicles to explore and characterize benthic habitats associated with prime fishery areas for deep (100-200m) snapper and grouper assemblages that are of high priority in the Puerto Rico fishery.
5. Multi-layered digital tools, including story maps, to facilitate analyses of potential impacts by fishery and non-fishery related projects upon EFH and HAPCs.
6. Production of a GIS digitized commercial fishery landings database for Puerto Rico and the US Virgin Islands, allowing temporal and spatial analyses of species landings through time for both jurisdictions.
7. On-going revision and improvements of the CFMC web page to provide user friendly access to EFH maps and species-habitat information.

Gulf of Mexico Council

The Gulf of Mexico Fishery Management Council will continue working closely with partners at SERO and SEFSC as these relationships are imperative to achieving EFH in the Gulf of Mexico. In the short-term, a few tasks are either scheduled to begin shortly or are currently in progress.

- Currently, the Gulf Council, SERO, and SEFSC are collaborating on a new EFH amendment that will help define EFH policy goals within Gulf Council's fishery management plan (Initial draft to be presented to the council early 2020).
- The Gulf Council has and will continue to address the comments given by SERO regarding the Council's 2016 EFH 5-year review (currently ongoing).
- Identify any EFH designation changes defined in the EFH amendment that require updating based on recent 5-year EFH review (Fall of 2019).
- The Gulf Council is currently working to update portions of the website to make pertinent material informative for EFH consultation more readily available (Will be evaluated early 2020).

Pacific Council

Identifying priorities: The Pacific Council's Habitat Committee is currently working with the region to identify a set of priority actions for council comment. At the same time, NOAA Fisheries West Coast Regional Office (WCRO) is developing an internal process to inform the Pacific Council of relevant habitat actions.

Communicating data needs: The Pacific Council is planning to develop a searchable database of research needs similar to that of the NPFMC.

Communicating with the public: The Pacific Council and WCRO are both making changes to their websites. The Pacific Council plans to enhance the habitat section with links EFH, West Coast Region EFH, etc. WCRO is transitioning its website to the National NOAA Fisheries website. The EFH information is being improved and reorganized to be more accessible.

Clarifying habitat goals: The Pacific Council will combine its existing general habitat goals into one document and post this to the new habitat page on our website. Eventually the Pacific Council would like to have goals associated with HAPCs (for example, no net loss of any particular habitat function).

The Habitat Committee would need to propose these goals to the Pacific Council with the intent of providing guidance to support NOAA FIsheries non-fishing consultations that cover HAPCs. That could be framed to the council as elaborating on our habitat goals to focus on HAPCs. The NOAA Fisheries Regional EFH team would need to develop guidelines for incorporating council general goals and position statements (and eventually HAPC goals) into consultation documents. They hope to do this by next spring.

Position statements: The Pacific Council's habitat correspondence contains many position statements that could be extracted and organized. This would be helpful to the Region in terms of developing EFH.

Training on Pacific Council role: NOAA Fisheries WCRO EFH team plans to roll the concept of the Pacific Council's role into its trainings for staff and action agencies.

Cross-Region Coordination: Partly due to the wave energy discussion at the meeting, the Pacific Council's Habitat Committee has invited the Responsible Offshore Development Alliance (see Session 5 summary) to present in November.

North Pacific Council

Timeline for action

- Oct 2019: Short report to the North Pacific Council on CCC HWG workshop in the October council meeting Executive Director's report.
- Nov 2019: Send final workshop report to Ecosystem Committee once prepared for the November CCC meeting.
- Jan/Feb 2020: Present briefing on the workshop, and potential opportunities for improvement to council-NOAA Fisheries coordination on EFH and habitat issues in Alaska, at the next Ecosystem Committee meeting on January 28, 2020. Ecosystem Committee can prioritize among actions, and task staff to work on any that are deemed important. The Council will review and approve the Committee's recommendations at the February North Pacific Council meeting.
- Apr 2020: Present staff work on any tasking at the April Ecosystem Committee meeting, in conjunction with the annual EFH review. If agreeable, schedule council agenda item to review e.g., a refreshed North Pacific Council-NOAA Fisheries habitat operating agreement.
- May 2020: submit an update on Alaska progress to be included as part of CCC HWG's annual report to the CCC.
- Subsequent: continue to work on other ideas and opportunities on an appropriate schedule.

List of potential opportunities for improving coordination on EFH and habitat issues in Alaska

1. Update the North Pacific Council website to link to the NOAA Fisheries EFH website. As was pointed out at the meeting, NOAA Fisheries Alaska Regional Office (AKRO) has done a great job developing their EFH website, and while there is no need to duplicate that effort, the North Pacific Council should do a better job linking our habitat pages to the NOAA Fisheries site as well as to habitat goals that the council may have articulated.
2. Improve communication between NOAA Fisheries and North Pacific Council/Council staff about agency EFH consultations. A range of ideas could be considered here, including scheduling regular briefings among ourselves, having NOAA Fisheries copy council habitat staff on all EFH

consultation letters (and potentially including such letters in council mailings), including council staff in periodic check-in meetings with partner agencies (primarily BOEM and USACE), and providing a RO Habitat Conservation Division update slide in the NOAA Fisheries management report at each council meeting.

3. Involve the Ecosystem Committee more in annual EFH briefings to the North Pacific Council. Begin with a short briefing to the Ecosystem Committee (and the council?) about the process and frequency of EFH consultations occurring at NOAA Fisheries, to reacquaint the Committee with how the council may choose to engage. Distinguish between "may" and "shall" instruction in the MSA regarding salmon projects. Identify the degree to which the Committee should be involved.

4. Review the NOAA Fisheries Geographic Strategic Plan (GSP) with respect to habitat science. The GSPs are intended to formalize operating agreements between the FSCs and the ROs for each region, with council involvement acknowledged. These provide an opportunity to ensure that any council needs and concerns for habitat science are addressed.

5. Have the North Pacific Council articulate and adopt habitat goals. For this workshop, staff pulled together the disparate list of habitat goals that are explicitly in council document across the board, and implicit in the actions the council has taken in recent years. These could be reviewed by the Ecosystem Committee and the council, formally adopted, and listed transparently among the North Pacific Council's management policies. They should distinguish global and project-specific goal types.

6. Develop North Pacific Council guidance of when to provide council comments on habitat concerns. Several examples were provided at the workshop of other councils that are articulating generic comments about specific activities that are likely to have an adverse impact on habitat, or the degree of impact threshold that necessitates council involvement or comment. Having a more transparent guideline would allow the council, its staff, and NOAA Fisheries to a better gauge of when a proposed project is likely to be one on which the council intends to comment. Could address types of activity or threshold for potential impacts as well as when in process council would prefer to engage (e.g., during planning or only permitting stages, etc.). The NOAA Fisheries 'triage' list for consultation could be a useful starting point.

7. Refresh the NOAA Fisheries-North Pacific Council agreement on EFH consultations. The council and NOAA Fisheries adopted their agreement for biannual consultation updates from NOAA Fisheries in 2012, and it is appropriate that the document be reconsidered at this time. The refresh should include any relevant opportunities of interest to the council from the above list (e.g., articulating habitat goals or policy positions related to when the council may choose to provide comment, etc.).

8. Discuss whether to reconstitute the Alaska Marine Ecosystem Forum (AMEF). A first step could be to conduct (update?) a survey of non-fishing activities occurring in federal waters off Alaska, and potential overlap with fishery concerns. Consider whether the State of Alaska (especially agencies outside of the Alaska Department of Fish and Game, Department of Environmental Conservation, and Department of Natural Resources) would be interested in participating in a reconstituted AMEF. Reconsider the memorandum of understanding for the AMEF, and what purpose it would serve relative to other coordination groups, especially with respect to workshop concern of being ready to rapidly mobilize to address new activities should they occur.

Western Pacific Council

Western Pacific region representatives discussed potential improvements to habitat management, summarized into three categories: information/data, communication, and internal council changes. The details for proposed improvements, tools, and steps needed (including timeline) are provided below by these categories. Note that these improvements are only proposed and need to be vetted by the council and its advisory groups, in coordination with the Pacific Islands Regional Office.

Information/data

Western Pacific habitat data availability is poor, which limits the ability to designate EFH beyond the most basic levels. Data could be improved through the development and implementation of baseline surveys and additional habitat data collection. For the data that are available, providing easier access to managers and users would facilitate use and priority planning. The following actions are proposed to help improve data accessibility in the region.

- *Include habitat maps and shapefiles on the PacIOOS website*. The Pacific Integrated Ocean Observing System (PacIOOS) houses many data streams related to the Pacific Ocean and may be a suitable place to house habitat information for the region as well. The Western Pacific Council should meet with PacIOOS to request EFH maps and files be made available as a layer/tool on its site. A meeting can be held immediately though it is unknown what process PacIOOS uses to review and secure data layers for its site.
- *Improve information available on the Western Pacific Council websites*. Simpler tasks like including research priorities and maps on websites can be done quickly and immediately. Also, using optical character recognition in PDF documents would allow for FEP text to be searchable with little effort. The council will strive to ensure that EFH designations listed on the website are current and available. Other changes to improve the availability of information that clients look for directly, like changes to species or designations, are harder to find and older documents may need to include optical character recognition. The Western Pacific Council and NOAA Fisheries can meet immediately to develop a list of those documents or information that is needed but is harder to find, and make appropriate changes to its websites.

Communication

Communication within the region is key to understanding between the Western Pacific Council and NOAA Fisheries. The following steps could be taken in order to improve communication.

- *Review the EFH Regional Operating Agreement (ROA)* to ensure that roles and expectations are accurate and maintained. The ROA provides both the Western Pacific Council and NOAA Fisheries with an understanding of each organization's responsibilities. The ROA is reviewed annually so potential changes can be made within the next year. Potential changes to be discussed between the organizations could include requesting habitat presentations to the council annually on consultations, as well as assisting with a habitat/ecosystem module for the annual Stock Assessment and Fishery Evaluation reports.
- *NOAA Fisheries to provide the Western Pacific Council with briefings on the consultation process*. The consultation process is not well known outside of NMFS, so having a presentation to the council and/or its advisors will be beneficial in improving communication. The council and its advisors would have a better understanding of what happens during a consultation and what

could trigger the need for mitigation measures. Briefings to the council and its advisory groups can be scheduled at any time and requests will be made to NOAA Fisheries.

- *Developing council policies and/or position statements* would likely make communication of the Western Pacific Council's stance on habitat issues (both fishing and non-fishing impacts) more broadly available and clearer for other agencies to use in the consultation process. Developing a policy or position statement would likely start with the council's advisory groups and later approval by the council, and could take one to two years to complete.

Internal council changes

Within the current Western Pacific Council structure and processes, the following steps can be taken to improve coordination.

- *Council staff shadows a consultation with RO staff* to better understand the process of consultation from request to completion. Council staff receive requests from outside agencies for the council's assistance on interpretation and mitigation requirements. There is often a loss of institutional knowledge within the council as habitat coordinators are either shifted to other tasks or leave the council staff. Providing an opportunity for council staff to work closer on a consultation would allow for them to better understand how conclusions were reached, should there be questions. There would need to be agreement by the council and RO to add to staff workload, and it could be implemented immediately.
- *Use the Regional Ecosystem Advisory Committee (REAC) to pivot towards habitat*. The council's current advisory group for fishery ecosystems is being reimagined to better address EBFM. A pivot towards habitat can be included in this reimagining, including using the REAC for reviewing habitat goals, policies, and annual report modules. This task can be implemented within the next year after discussion with the council and staff on the direction of the REAC and EBFM.
- *Clarifying habitat goals, research priorities, etc*. FEPs include habitat in goals and objectives, but not explicitly. Research priorities also tend to be more fishery-based rather than exclusively habitat-base. The Western Pacific Council, through the REAC, may look to clarify FEP goals and objectives to include habitat, and may provide priorities for habitat-related research. This work would be done through the REAC at future meetings in the next one to two years.
- *Identifying the EFH designation approach (and prioritizing the review cycles)* would help the Western Pacific Council provide a better understanding of its intent in the designation of EFH both in the past and in the future. This is another work item that could be added to the council's advisory groups in the next one to two years.

Headquarters Offices of Habitat Conservation and Science & Technology

The Office of Habitat Conservation (OHC) supported the development and execution of this workshop to build connections among regions and between council and RO staff. While the 2016 EFH Summit provided an opportunity for attendees to learn about examples of effective EFH implementation and build a framework, this workshop allowed participants to fill in the pieces by brainstorming, working in small groups, sharing and discussing ideas, and thoroughly comparing methods and technologies across regions. With workshop participants sufficiently energized to continue increasing the efficiency of EFH processes, OHC will continue to support the CCC HWG. Additionally:

- OHC is actively engaged in discussions with each RO on how to best incorporate workshop conclusions into a revision of official EFH guidance and council recommendations.
- OHC will support councils in establishing policy statements for activities that may trigger consultations, and in setting specific habitat goals linked to fishery outcomes, which can enhance NOAA Fisheries' conservation recommendations and help promote early EFH consultation coordination.
- OHC will support the development of regional action plans, as appropriate.
- OHC will explore opportunities to enhance capabilities of the National EFH Mapper with links to updated information in appropriate council web services.
- Tools and technology that can facilitate EFH information sharing and consultation processes can be discussed and shared on a national level, facilitated by headquarters.
- Outcomes and recommendations will be discussed with fishery science center representatives, and OHC will host a webinar for science centers to engage in discussion with the group on research-related topics in the context of management needs.
- OHC can play a role in coordinating council research priorities and linking priorities to NOAA Fisheries activities.
- OHC and S&T will share outcomes from this workshop with the NOAA Fisheries National Habitat Leadership Team and FSC Habitat Science representatives at their November 2019 meeting.
- Success stories (for example, regional products and presentations) will be shared around headquarters and the regions with the aid of OHC's communications team.
- NOAA Fisheries' websites could be better cross-linked with council habitat pages and web services and habitat and ecosystem tools, which could be facilitated at a headquarters level.

Reflections and next steps

The workshop was an important opportunity for HWG members to identify potential work items for 2020. Next steps for the HWG could include the following items:

- Report to the CCC on progress towards implementing ideas generated at this workshop. A preliminary report can be provided at the November 2019 CCC meeting and a more thorough presentation of next steps will be provided in May 2020.
- Improve the content of councils' and NOAA Fisheries' EFH-related websites and communication practices.
- Review the Habitat Assessment Improvement Plan 2 and determine if these habitat priorities are being included in regional planning activities, such as research plans and habitat-related initiatives at each council.
- Track progress on the ongoing revisions to NOAA Fisheries' EFH consultation guidance.
- Provide the National Habitat Leadership Team with this report for inclusion in the November 2019 meeting materials. If the Team discusses report contents, the HWG will welcome feedback and habitat science-related opportunities.

- Identify the best ways to directly engage with FSCs during future CCC HWG calls and in-person meetings.
- Continue to discuss the science and data needed to improve effectiveness of EFH designations, including the following:
    - Tool and model validation.
    - Learning from other regions' use of habitat data and integration with assessments.
    - Learning from other councils' or regions experiences related to specific habitat issues. For example, in part as a followup to the wind energy discussion held at the workshop, the Pacific Council has reached out to the Responsible Offshore Development Association to learn how wind energy issues have been addressed on the east coast and to prepare for similar activities in the Pacific.
    - Sharing architecture and communication tools.
    - Cooperate to acquire information related to needs identified in fishery management plans (through the most recent EFH 5-year reviews) and fishery ecosystem plans. Highlight habitat data needed to increase the levels of EFH information available. The working group will explore the potential for shared research priorities among councils, ROs, and FSCs.

Appendix 1: Workshop Participants

Councils	Michelle Bachman, NEFMC	**NOAA Fisheries ROs**	Anne Chung, PIRO
	Jessica Coakley, MAFMC		David Dale, SERO
	Joshua DeMello, WPFMC		Matt Eagleton, AKRO
	Diana Evans, NPFMC		Stuart Golderg, PIRO
	Jorge (Reni) Garcia, CFMC SSC		Karen Greene, GARFO
	Jennifer Gilden, PFMC		Ian Lundgren, PIRO/OHC
	Kerry Griffin, PFMC		John Olson, AKRO
	Lisa Hollensead, GMFMC		Korie Schaeffer, WCRO
	Steve MacLean, MPFMC		John Stadler, WCRO
	Roger Pugliese, SAFMC, 2019 CCC HWG Chair		
NOAA Fisheries HQ	Heather Coleman, OHC		Margaret (Peg) Brady, S&T
	Emily Farr, OHC		Tony Marshak, S&T
	Tauna Rankin, OHC		

Appendix 2: Potential Approaches to Facilitate Council and Regional Office Collaboration on Non-Fishing Activities Impacting EFH

This appendix presents a broad range of approaches currently being implemented in various regions to facilitate collaboration on non-fishing activities that may adversely affect EFH. The approaches listed can be taken by councils, ROs, or both. The HWG expects that not all of the following items are appropriate for every region, but this appendix provides them as a reference when developing region-specific approaches to collaboration. We view this section as a "living" document that will be updated as new approaches are developed.

Approaches to identify council areas of concern

Improving communication between councils and ROs on areas of council concern (specific habitat types or non-fishing activities, e.g., offshore energy projects) would position the councils to meet their statutory authority to provide comments on federal and state actions that may adversely affect EFH (MSA 305(b)(3)). A coordinated approach will take advantage of expertise, promote consistency within conservation recommendations, and maintain consistency with council policies. Team approaches can lead to deeper fisheries engagement, as well as more robust analyses and conservation recommendations. Potential approaches include the following items.

- List of interests and topics of concern: These interests and topics may be associated with specific habitat types or non-fishing activities or represented in standing council policies. They are most helpful when transparent and on the web, available to applicants.
    - Council committees can suggest specific ideas in collaboration with advisors or other council stakeholders.
    - Stakeholder presentations and meeting sessions can allow partners to describe potential activities that help councils identify what upcoming key issues.
    - Background and education will be important on specific topics, and will require working with the right experts. Focus on opportunities to identify specific elements of projects that will be of most concern (on a council level or staff level), and identify nuances that really matter.
- Council policy statements: Ideally, council policy statements provide guidance for use by a council, NOAA Fisheries, and state and regional partners on the breadth of potential activities and standing council policy related to a habitat type or activity impacting EFH.
- Organization of issues needing habitat guidance: Annually develop a list of key issues on which a council (or advisors providing habitat guidance) should be briefed, which could include (but not limited to): ongoing research, potential projects, potential impacts, and consultations.
    - As new issues are identified by NOAA, council members, council staff, or regional advisors, the responsibility is on individuals to check if a project type that is new within a region requires consultation, especially if an issue will become more relevant over time.
    - Identify general criteria for things that the council would generally comment on (to apply to out-of-the-norm circumstances, i.e., precedent setting).

Approaches for keeping councils informed about projects on which NOAA Fisheries is consulting that fall under council-stated habitat priority areas

- Annual/periodic report from RO Habitat Conservation Divisions to councils.
    - Membership and participation on council habitat (or ecosystem) advisory panels or committees can provide an ongoing interaction.
    - Attendance at meetings preferred to allow questions and dialog.
- Briefings by RO Habitat Conservation Division and/or FSC staff (to councils, committees, advisory panels, etc.) on issues of stated council concern. These briefings could facilitate councils to provide formal responses, draft policies, or recommend research needs to address non-fishing activities impacting habitat.
- Copy council staff on formal NOAA Fisheries' responses to permits. For instance, the South Atlantic Fishery Management Council has a process where EFH consultation letters are provided by NOAA Fisheries with a spatial reference so they can be included and accessible through the South Atlantic Council's EFH Web Service.
- Use 5-year EFH reviews as an opportunity to update councils on specific recommendations, changes to non-fishing advice, etc.
- Encourage regular communication at the staff level about potential upcoming issues or actions to encourage early coordination on projects of stated council interest.
    - Effective communication relies on institutional knowledge of long-term council and NOAA Fisheries staff. Knowing who to reach out to is key.
    - A guide for who to talk with is especially needed for new staff.
- A new communication tool at NOAA Fisheries, Environmental Consultation Organizer (ECO), tracks projects in consultation (it replaces the old system, PCTS) and allows viewing of completed consultations. The public interface is now live.
    - ECO includes title and EFH impact information. It may also include spatial information and letters from NOAA Fisheries to action agencies.
    - Notification subscriptions are not currently built into the system.

Approaches for councils to provide comments

- Letters can be written by staff if a policy statement is already in place and a project falls within the range of issues/impacts considered in the policy statement.
    - Highlight council standing policy that could support or augment concerns already raised by NOAA Fisheries.
    - Councils generally focus on the big picture with their concerns. Allow NOAA Fisheries to draw on council standing policies to delve into details of specifying local conservation recommendations. Note the level of detail presented in standing policies may vary by region.

Approaches that councils can use that NOAA Fisheries cannot (council added value)

- Councils can write letters to governors, Coastal Zone Management offices (e.g., to extend a comment period, express concerns about process or other big-picture issues for a region).

- Councils can serve as a conduit for input from stakeholders on social and economic impacts.
- Councils provide the weight of fishing industries and state/regional partners about what does or does not matter to a council.

Approaches to address constraints of timeliness

- Early information sharing on projects is often very beneficial The benefits are especially dependent on good working relationships between NOAA Fisheries, councils, and cross-council staff connections.
- Policy statements facilitate council-supported letters to be submitted even if the timing does not overlap with a council meeting.

Appendix 3: Feedback Summary from Pre-Workshop Partner Survey

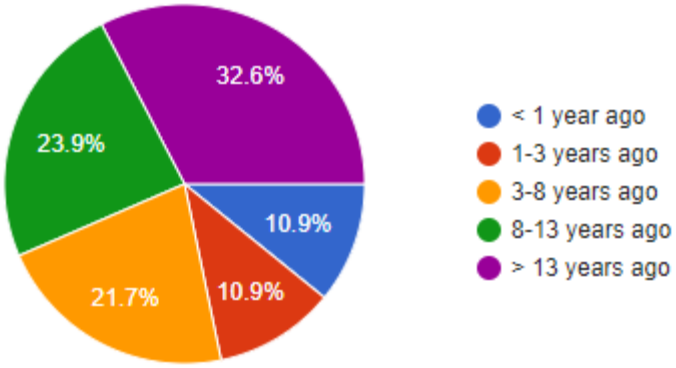
The CCC HWG solicited feedback from NOAA Fisheries personnel outside of the work group who have knowledge of EFH designation and consultation practices and issues, and well as employees of partner agencies who consult with NOAA Fisheries or have other EFH-related knowledge. A summary of respondents' feedback follows.

Respondent affiliations:

How have you been engaged with NOAA and/or Fishery Management Council(s) on EFH?

- Pursued multiple actions that have triggered multiple EFH consultations - 30 responses.
- Pursued an action that has triggered an EFH consultation - 18 responses.
- Involved in EFH designations or modifications - 15 responses.
- A former member of ASMFC Habitat panel, As a NCDMF representative I work in parallel and discuss projects with NMFS representatives.
- HCD-GARFO staff; involved with NE Council Habitat PDT; Mid-Atl FMAT.
- Supervise combined EFH/ESA consultations for NMFS.
- Oversaw many EFH consultations (from NOAA manager viewpoint).
- I am the aquatic farm lease coordinator for DNR and we have received EFH information in response to our agency notices of a proposed lease at times.
- CFMC SSC member and Chair; researcher on EFH.

How long ago was your first interaction with EFH?



Are you aware of whether the council(s) you work with have habitat conservation goals?

- Yes - 31 responses.
- No - 14 responses.

Would council articulation of habitat conservation goals help facilitate coordination in the EFH consultation process?

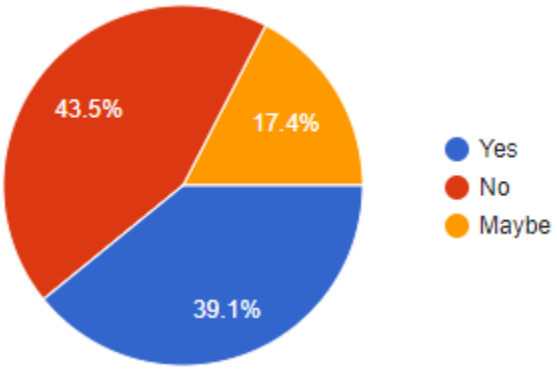
- Yes - 40 responses (more detailed answers below):
  - Coordination throughout our NEPA planning process (especially early on during NEPA scoping) would be recommended.
  - We would know what the priorities are and how we can best consider the effects of our actions on their overall goals.
  - We try to contact NOAA at the beginning of a process. So any early coordination is very helpful - especially on what priority habitats may be in our project area and what surveys we need to complete, if any.
  - If we built in stipulations or considerations into the proposed action it could potentially streamline EFH consultations. But coordination with councils rarely happens prior to NMFS involvement in my experience.
  - Such a definition could inform the mitigation process for regional areas of habitat.
  - Being able to cite a council document could be helpful, particularly with early coordination projects. However, if the Council does not also articulate the stated concern as projects move forward, citing the council document will likely lose some of its impact and become just another citation in a letter/discussion.
  - It would help to inform effects determinations on EFH and encourage avoidance and minimization in the pre-application stage.
  - Habitat conservation goals, as long as they were relatively simple/straightforward and meaningful, could help facilitate coordination and result in better assessments and conservation recommendations. However, they could potentially confuse the process since these goals are not currently part of the consultation process regulations. An action agency may not understand how to use/interpret the goals. However, if written and presented in a clear, coherent way, they could help to inform the effect determination and associated analysis.
  - We only hear from NMFS. The council goals would help us prioritize, and help us understand their point of view.
  - Any clarification of conservation goals would be helpful for facilitating consultation.
  - This would help justify to applicants the importance of the CR and justify the permit decision.
  - A clear statement of EFH consultation goals would improve knowledge and working together.

    - They assist NOAA in providing EFH conservation recommendations.
    - What would help is more review of impact projects by the council.
    - This helps us shape our projects and reduce impacts or avoid sensitive habitats.
    - The Pacific Council attempted to habitat conservation goals in its FMPs. However, a more narrow articulation of goals would have helped the most recent EFH review that the council conducted for groundfish.
    - It is appropriate for NOAA to provide that information during the DNR Agency 20-day Notice.
    - It may help focus and/or prioritize our work, and NMFS and council working together would likely improve conservation outcomes.
    - Particularly if a) based on sound, regional (vs. activist agenda) driven data; and b) published independently (available w/o consultation) so that during project development those goals could be worked into project design. Many opportunities for collaborative improvements to habitat are likely lost when alternatively they could be beneficial byproducts of project design that would cost little or nothing to provide.
    - Maybe designating certain zones that have priority species on habitats, so if a project is in an area that has EFH designated for all or almost all FMP-managed species, consulting agencies could look at which zone it is it and which species/habitat is a priority for that zone. It would at least help narrow down the consultation to the species that have been determined a priority for conservation, and then it would be helpful to have a go-to list of mitigation recommendations for those species. Obviously this would not be an end-all be all, but it would be a good place to start and provide some consistency across consulting parties.
    - It would help when developing an EFH assessment; if the goals were explicitly listed on the website, we could include a deeper discussion and/or provide better description of how our action does/does not impact the habitat.
    - Especially on large scale projects and in particular where they are concurrently being evaluated with needs for listed species and critical habitat as well and how that could benefit or impact sustainable fisheries and catch limits.
- What would help is more review of impact projects by the council.
- It is not clear how the council wishes to engage the RO on EFH consultations, and can commit to meeting regulatory deadlines.
- Short answer: yes. Long answer: No. We have not formally consulted the council for EFH consultation, instead consulting solely with NMFS and seeking technical assistance on EFH designations from the council. Per guidance from NMFS, we understand that council goals do not factor into how NMFS approaches consultation. This disconnect between the council designation and NMFS implementation creates a rift for those who much consult with NMFS.
- Probably not for me because I work primarily on the freshwater part of Pacific salmon EFH, where ESA consultation is king and EFH consultation usually adds little additional value.

Examples of where a council's clear articulation of goals/priorities around habitat conservation has enabled this early coordination?

- Regional conditions for the Corps NWP program.
- The council's habitat conservation goals were considered in our recent review of groundfish EFH.
- HAPCs in the Gulf of Mexico.
- Production of SAV as HAPC for Summer Flounder has been instrumental in development of general conditions to avoid these areas.
- MAFMC policies are always used to help action agencies better design projects.

Are you aware of council policy statements on habitat management or impacts/concerns related to non-fishing activities?



If yes, do you use them in EFH consultations or other work?

- Yes - 10 responses:
  - To assist with developing compatible state policies or fill gaps in federal policies.
  - For EFH consultations, NEPA documents, and white papers or reports.
  - I use them in general to promote habitat restoration.
  - Only in a such a way that I know what the end goal is. I don't often use specific policy goals.
  - I have used them in consultation, however, NMFS-HCD has informed me that the council provides no input for consultations. Thus, if I justify a determination using information from a FEP, I am informed that it is inaccurate. I think it would be most useful if NMFS-HCD would be able to articulate their needs for consultation prior to plans being formulated. Again, they have not been able to provide clear and consistent consultation without, what I would call, near complete plans. Because of this and a lack of general EFH assessment needs, it is difficult to plan projects to fully suit the needs of NMFS-HCD in an efficient manner.
- No - 4 responses.
- Sometimes.
- Rarely.
- The MAFMC has approved a number of specific policies regarding how to minimize the habitat impacts of offshore wind power (e.g., burial of transmission cables) that reinforce many of the priorities that NMFS/GARFO follows when submitting comments and making conservation recommendations for individual wind energy projects. They were developed in order to assist the Council when it drafts its own comments, but in reviewing recent comment letters to BOEM from both regional councils, I find no mention of these policies. Council comments are mostly directed at fishery impacts.

If no, would they be useful to you? What would a useful policy statement look like?

- Yes - 18 responses:
  - Any council or agency policy would bolster our permit decisions.
  - Something specific...what, where, when and why.
  - Should state the overarching goals and priorities. As well as a step by step approach that agencies should follow to complete EFH consultation.

    - Understanding the intent for designation and the impact non-fishing activities have on EFH and ensuring that policy is adhered and the goals achieved, would reasonably be expected to greatly inform consultation.
    - Articulation of concerns, proposed mitigations and guidance for specific activities is helpful. If these differ by species/EFH, it would help to note that.
    - If they have a specific purpose with well-defined terms, clear expectations, a concise implementation process, and can be captured in a 3-page document, although 1-page would be even better.
    - They would be useful in making effects determinations. Useful: easy to read, including flow charts or something similar.
    - A statement pertaining to coastal development and the impact it has on nursery habitats would be of interest.
    - A statement regarding the life stage and potential stressors that are of interest would help.
    - It would be helpful to the regulated community to know what the Council's habitat protection goals are so that it is just not NMFS trying to protect habitat through its regulatory role.
    - Specify it's intended use. Coordinate development of the statement with the Division of Habitat Conservation. Use the Council's ability to leverage action that the agency is unable to do.
    - The RO and FMC coordinated by regional operational agreement, so policy statements that are mutually agreeable would likely be preempted by that agreement.
    - A helpful statement would be: The Council is committed to reducing impacts to submerged aquatic vegetation due to it serving as habitat for juvenile cod. Please include in the EFH any impacts to SAV as a result of your action and ways that impact can be mitigated.
    - "It is the policy of the Council to recognize that rural infrastructure improvements are important to the social and economic viability of many communities; and that working cooperatively with agencies tasked to provide those community benefits may synergies that also enhance and improve important fish habitats and/or local fisheries."
- It would be useful to periodically reinforce/restate those statements for less experienced project managers entering into the field.
- MAFMC wind energy policies are well articulated and would be useful if applied, but we wouldn't use them (not directly)...the councils would.
- Since I said maybe, I would like to think specific goals that we could utilize when engaging the regulated public would be helpful. Particularly if it is something we could cut and paste or reference when we are requesting and/or providing information to public.

Within your region, do you coordinate with or across councils, regional offices, and/or fishery science centers in broader marine spatial planning processes, or other activities occurring in the region's offshore space in the context of habitat and EFH consultations?

- Yes - 21 responses:
    - As a member of the Habitat AP, collaborate on policy revisions; participated in SE bottom mapping workshops.
    - Aquaculture, offshore energy.
    - The PFMC routinely writes letters to federal agencies (like BOEM) on impacts of offshore wind, oil & gas leases, wave energy, etc. (Writing letters is the only action the PFMC can take in terms of non-fishing activities). These letters are generated by the Habitat Committee.
    - Work in Pacific West Region of NPS - so work in waters off of WA, OR, CA, Hawaii, Guam, Saipan. Occasionally talk with different NOAA staff in different regions, but generally don't coordinate within a group of these individuals.

    - I have worked on the action agency side of a programmatic EFH consultation, which included three different NMFS regions. I dealt with one NMFS point of contact, then she coordinated internally.
    - We always work without regional office. For one project in my experience (NYNJ Harbor Deepening), we also worked with NEFMC to share data and with a Science Center to jointly collect and analyze data on winter flounder.
    - I have asked for information on EFH in project areas. Also discussed conservation measures with regional office.
    - EBFM initiatives.
    - I participate in a team that is developing an interagency coral functional assessment credit/debit tool.
    - I coordinate with both regional councils on EFH consultations regarding habitat impacts of fishing and development of EFH designations and other MSA EFH requirements of FMPs. I am also a member of the NMFS wind energy team, coordinating with NEFSC, state agencies, and the councils on habitat impact assessments.
    - The Corps is regularly engage to participate in planning processes with NMFS and other stakeholders.
    - Offshore wind is the prime example.
    - O&G leasing and activity.
    - I primarily deal with harbor construction, dredging, and dredged material placement/disposal.
    - DNR includes NOAA in our agency notice for all proposed aquatic farm leases.
    - Variable levels of coordination on aquaculture, energy, and oil/gas projects within marine habitats.
    - We coordinate our offshore science goals and needs with multiple councils for renewable energy and marine minerals
    - In a nutshell, the capability of primarily Alaska Native communities to safely access traditional areas for subsistence use of marine mammals and fish.
    - Involved with the CFMC and SEFSC to develop an Ecosystem Plan.
- No - 19 responses.
- Maybe - 6 responses.

Do you have ideas for how those groups might coordinate to share ideas/expertise, collaboratively track issues, or enhance existing processes, like EFH consultations?

- More outreach to state and federal resource agencies that review permit applications or play a role in water dependent activities.
- Share list of resources present, and surveys that have been completed in particular areas, so that we can share research and resources.
- I don't know the internal coordination process, but it does seem to simplify the process to communicate with one primary person.
- All concerned federal and state groups involved in EFH consultations will be greatly benefited by availability of a master multi-layer biogeographic database that may facilitate the evaluation of proposed activities in the context of the existing marine biological resources and the prevailing physical and oceanographic characteristics of the region(s) in question.
- Create a cross discipline think tank workshop.
- Ask regional leadership to articulate a vision that includes development of a professional community made up of people from these various entities to identify the most pressing problems related to issues on your list, then empower/reward that community to work with each other to solve those

problems. Regional leaders must also follow-up on that vision with time and resources to support it, or no new or additional effort at coordination is likely to occur.

- One issue I have seen is that there isn't one agency responsible for tracking the effectiveness of conservation measures and mitigation (avoidance, minimization, and compensatory mitigation). The Corps tracks it for individual projects, but doesn't have the staff or the mandate to collate the information and assess the results. It would be nice if there were a single-point "clearinghouse" where this information could be stored (and displayed on GIS) and used to help inform future resource management decisions.
- Needs dedicated staff or contractors tasked with coordination.
- I try to base my assessments off of the information I have read in the FEPs, the Fisheries Regulations, and NOAA and the Council's websites. NMFS-HCD has repeatedly stated that these documents have errors and that they do not follow them in consultations. When asked what is needed to accurately assess impacts to EFH, they say that it is all project specific. I can appreciate this but they should have some basic, general level of expectations that they can share. They have also been asked if they could provide information on how they review impacts so that agencies could work backwards and find the basic information needed for review. Again, they said that they do not know until they look at a project's specifics. I find this very hard to believe. That a federal agency does not have a review plan in place for review according to law. EFH consultations could be enhanced if these groups could provide clear, concise, and consistent levels of information needed for EFH impact assessments. If this information already exists and/or if the regulations, FEPs and websites are in fact accurate, then EFH consultations could be enhanced by NMFS-HCD being made aware of this.
- It would be nice to have Councils more engaged with anadromous fish restoration projects which are clearly linked to offshore resources.
- develop working groups around certain regularly-encountered actions: dredging, aquaculture, etc. and develop a list of go-to mitigating measures to institute in these types of consultations, as well as just meeting regularly to keep up on the status of all these types of projects.

What do you see as potential improvements in access to online EFH information of value to partners involved in the EFH consultation process?

- More accurate Mapper; NMFS providing FULL EFH managed species lists, not partial lists.
- If reviewers referred to the online EFH resources, it could improve thoroughness and efficiency of commenting, ensure impacts are avoided.
- A clear precise website. Current website is too busy and hard to navigate.
- Publicly available maps are good now but can always be improved either in information provided or user accessibility/ease of use.
- Ability to upload a shape file of an impact area and see all pertinent EFH consultation species/ HAPC, conservation area information, etc. - right now the tool is useful but could be improved.
- The EFH mapper tool is useful but can be confusing.
- Provide very clear, simple, step-by-step instructions. Assuming that the reader doesn't have a background or understanding of the issues or process.
- Information on steps or thresholds that could make the consultation informal rather than formal (e.g., a list of mitigation measures). I work for BOEM, and we are currently working on a mapping tool that automates an EFH assessment to be used internally for our consultations with NMFS. Something like this may be very useful for other stakeholders, especially if they are less experienced in consultations.

- Our consultations with NMFS Regional office are excellent. Local staff are helpful and flexible to work with our agency challenges and needs. Early communication, including an explanation of our agency limitations and understanding of NMFS needs really helps.
- More comprehensive documentation of deep benthic habitats in the 200 - 500 m range and characterization of the biological communities at these sites.
- An EFH assessment template available online, similar to the expedited ESA informal consultation template.
- More communication between agencies is always helpful. More programmatics!
- Update your maps faster, continue to refine them based on new sci lit.
- Easier access to text descriptions - currently need to go species by species to get text or do a location search and then open each species text description.
- Easy access to a library of EFH impact analyses, avoidance and minimization measures, and case examples.
- Google earth overlays or easily obtainable GIS data.
- Easier and more streamlined system that includes all area under council jurisdiction.
- I think it would be invaluable to have a place where action agencies and the public could go to better understand the EFH process. The page should be clear and as concise as possible. It would be nice to have a tool where you could click on a spot on a map (e.g., project location) and know what MUS would be affected. Then, you could click on the plan for that MUS. Also, if there were a simple list of things people could incorporate for standard projects into their project design/project description to help minimize impacts to EFH that would be great. If you had a template for an EFH assessment, that would be great.
- Any specifics. At this point, if we put any project on a map, it looks like we can't build anything at all- there are time of year restrictions that overlap so that no work can get done, ever. I'm sure that's not actually the case, so if we knew what was of a real concern, we could focus our conservation measures.
- Efforts led by Michelle Bachman and the NEFMC Habitat Committee, in collaboration with Alaska Pacific University, to update a Fishing Effects Model and post model output on the NROC NE Ocean Portal will provide public access to a tool that tracks changes in habitat disturbance from fishing between seasons and years in time and space within the NE region.
- A tracking tool similar to the NMFS-PRD PCTS (soon to be updated) could be helpful. But our interactions with the St. Pete office are often responded to in reasonable time frames so the tracker would really function as a status check.
- I haven't done an assessment in a while but if the online tools could recommend CRs that if adopted resulted in final consultation, that might be handy.
- Update mapping tools in a thorough and timely manner. Eliminate HQ delays.
- More and better information online will improve consultation process so action agencies and consultants (public) can access data and provide analysis for EFH assessments. Spatial data assists the offshore planning process
- The NMFS-HCD has made it very clear that the FEP, Federal Register, NOAA and Council websites all have errors and that they do not utilize the information within them for consultations. Providing an accurate amount of information would be a start. However, I believe that these resources are not in error and that they were meant to be used in compliance with EFH consultations. It would be very helpful if the NMFS-HCD would use them and provide consulting parties with rational and pragmatic guidance for EFH impact assessments.
- Map portal doesn't always match written EFH descriptions. Open access to info regarding potential issues and the preferred way to mitigate or avoid impacts (like invasive species)
- The more specific and detailed it can be the better.

- Readily available/distilled information regarding federally managed fishery species' habitat utilization patterns and dependencies that are currently buried in FMPs/FEPs.
- Trainings on using the EFH mapper (using the mapper, intended uses); trainings on where to access EFH information (written in addition to mapped); trainings on the EFH consultation process; clear guidance on the EFH consultation process within each region; incorporating info into arcGIS online?
- Need to make it clear that the maps are only for life history stages where there is level 2 or higher data and EFH exists outside of the mapped area. Alaska Region EFH maps do not show EFH for nearshore waters because nearshore waters are used in early life history stages of managed species where there is insufficient information to map EFH. Those nearshore waters may in fact be EFH, but are not mapped as EFH for a managed species. That's a major problem with communicating to the public what is EFH for managed species.
- Development of user-friendly references and spatial platforms. As is, partners have to access multiple, voluminous FMP appendices, and the national EFH mapper has limited utility in helping to develop EFH/species lists.
- I strongly believe that the councils and ROs should be leveraging the FSC expertise and funding by matching investments in work that increases the levels of information for EFH designations. Better access to poor information is not the best approach IMO.
- This sounds like an IPaC sort of question. The IPaC-type format used by the USFWS is helpful for accessing information is helpful so long as it is more refined. If a project is in a specific area, and the habitat polygons cover three time zones, all that does is require in-person contact to ask what the relative risk is for that species in that location. Recognizing that broad-brush characterizations of 'risk polygons' has been used as a biologically and legally 'safe' way to do business in the grand scale, it does little to obviate the need to later meet in-person for consultations on the fine scale. If the online data could be much more fine-scale such (and of course more expensive to collect and maintain), it perhaps could reduce the need for in-person consultations.
- Improve the EFH Mapper!!! Nation-wide and local (I am in Alaska) It is NOT user-friendly.
- A template EFH assessment could be helpful. The Marine Mammal Protection Act's Letter of Authorization/Incidental Harassment Authorization application template is quite helpful for that process.
- I have not explored what we have online and need to spend more time looking into that first but would suggest having a workshop/survey with these partners to learn what we could do better for online resources. We had some resources for partners in the SER/GOM we shared via email because they often complained the EFH maps were so broad, guidance was vague, what actually occurs in a given project area was confusing for them. No sure if they would be good online resources but something like that might help if allowed.