

| <b>Current habitat strategies &amp; initiatives</b> |   |
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| <b>Caribbean</b>                                    | <ul style="list-style-type: none"> <li>• The CFMC is moving towards island based ecosystem management plans. To fill information gaps, the Council has been supporting habitat characterization and biodiversity assessments of key coral reef areas in both state and federal waters.</li> <li>• The CFMC will continue to endorse and support work on the mesophotic coral reefs in the EEZ, specifically beyond the 30 meters in depth. A library of video and photographs from mesophotic reefs, most work conducted under CRCP grants is being developed and will be made available to the public.</li> <li>• The CFMC intends to develop a model to assess effectiveness of MPAs as sources and sinks for fish eggs and larvae.</li> <li>• The CFMC intends to develop a GIS database to assist with the characterization of EFH around Puerto Rico and the Virgin Islands and to provide public and local managers access to fisheries and habitat information.</li> <li>• The habitat initiatives have been developed in collaboration and in partnership with various NOAA offices (CCMA/NOS, CRCP, SEFSC, SERO), CaRiCOOS, University of Puerto Rico, WHOI, and the industry, among others.</li> </ul>  |
| <b>Gulf of Mexico</b>                               | <ul style="list-style-type: none"> <li>• Held workshop on interrelationships between coral reefs and fisheries in 2013 to discuss current and emerging threats, challenges, and opportunities to the management of corals and associated fisheries, both now and in the future. Workshop recommendations including potential protective measures for specific deepwater coral aggregations are being reviewed by the Coral SSC/AP.</li> <li>• Developing a GIS database and data portal focused on coral reef ecosystems and associated habitats within the Gulf of Mexico in order to facilitate outreach and cooperation with stakeholders and scientists, to enhance spatial planning by centralizing information about habitats, species distributions, and threats (climate change, invasive species, etc.), and to assist with the incorporation of habitat data into stock assessments.             <ul style="list-style-type: none"> <li>○ Information from this database has been used in one stock assessment and will be used in further assessments.</li> <li>○ Information from this database will be used to improve the mapped representation of Coral EFH and to inform the next 5-year EFH review for other managed groups.</li> </ul> </li> <li>• <u>Committees and advisory bodies:</u> <ul style="list-style-type: none"> <li>○ Coral Committee and Advisory Panel</li> <li>○ Habitat Protection Committee and state Advisory Panels</li> <li>○ Artificial Reef Committee and Ad Hoc Artificial Substrate Advisory Panel                 <ul style="list-style-type: none"> <li>▪ Held March 2013 meeting with the Shrimp Advisory Panel to discuss issues, impacts, and concerns associate with artificial reef siting criteria.</li> </ul> </li> <li>○ Ad Hoc Restoration Committee</li> </ul> </li> </ul> |
| <b>Mid-Atlantic</b>                                 | <ul style="list-style-type: none"> <li>• 2014-2018 Strategic Plan: identifies ecosystem habitat science and management objectives and strategies.</li> <li>• EFH reviews and amendments: currently review FMPs individually but moving towards a process that reviews and updates EFH for all species/FMPs through an ecosystem approach.</li> </ul>  |

- Deep-sea coral protection: currently implementing through Mackerel-Squid-Butterfish FMP Amendment 16.
- Committees and advisory bodies
  - Ecosystem and Ocean Planning Committee: addresses issues related to EFH, corals, MPAs, wind farms, and ocean energy development.
    - Wind energy siting workshop (February 5-6, 2014) – Identify best management practices and mitigation measures for offshore wind development in the Mid-Atlantic region.
  - Ecosystem Approaches to Fisheries Management Scientific and Statistical Committee (SSC) Workgroup: developing operational guidelines to incorporate considerations on forage fish, changing oceanographic conditions, habitat, and socioeconomic effects into an ecosystem approach.
    - February 11, 2014 Climate Change and Fishery Science to inform the Council about the state of climate science and to inform the Council’s development of an adaptive fishery management framework that will effectively deal with ecosystem responses related to climate change.

**New England**

Habitat Omnibus Amendment:

- Phase I – Reviewed and selected preferred alternatives to modify EFH identifications and descriptions and HAPC designations.
- Phase 2 - Developed and analyzed habitat management area alternatives to minimize adverse impacts of fishing and improve groundfish productivity.
  - Developed spatially-explicit swept area seabed impact model to estimate vulnerability of benthic habitats in the NE region to the effects of fishing with different types of gear.
  - Developed hot spot analysis to identify areas with highest catch of juvenile and adult life stages – primary focus on large mesh groundfish stocks.
  - Considering designation of dedicated habitat research areas.
  - Final Council approval of measures expected later this year

Deep-sea coral conservation:

- Identified preliminary set of deep-sea coral management alternatives which will be modified based on results of 2012-2013 field research.
- Coordinates with NMFS to help the agency develop deep-sea coral research plans

Committees and advisory bodies:

- Habitat Committee: EFH and DSC conservation; ad hoc involvement in non-fishing impacts
- Ecosystem Based Management Committee
- Research steering committee: identifies research priorities, including habitat.

Engagement in non-fishing impacts to habitat:

- Works with BOEM to identify research initiatives for assessing impacts of wind farms on habitat and fisheries.
- Council member participates in Northeast Regional Ocean Council.

## North Pacific

- FY2014 EFH Research Plan: NPFMC, AKR, and AFSC identified two Emphasis Areas for consideration in addition to priorities in a multi-year EFH research plan:
  - Ground truth presence and abundance of coral habitat on the eastern Bering Sea slope.
  - Effects of marine mining on red king crab habitat in Norton Sound.
- Planning for 2015 EFH 5 YR review: Of the 10 EFH Fishery Management Plan components, NPFMC, AKR, and AFSC identified three focal areas for more detailed work:
  - EFH Description Refinements - including new analytical approaches; moving stocks to Level 2 information and beyond. HAPCs may also be considered.
  - Updating the Fishing Effects Model.
  - Inventory of Non-fishing Effects.
- Northern Bering Sea Research Area:
  - Bottom trawling prohibited in the northern part of the Bering Sea since 2008.
  - Area used for research on the potential impacts of trawling on the benthic and epibenthic fauna of the northern Bering Sea.
  - Outcomes inform management decisions on commercial trawling in the Bering Sea.
- Agreement with AKR/HCD on non-fishing impacts to EFH:
  - Identifies specific types of non-fishing impacts of greatest concern to the Council.
  - Requires NMFS to provide an annual report on its EFH consultation activities and outcomes.
- Ecosystem Committee:
  - Serves as steering committee for EFH 5 year review.
  - Workshop on research and reducing gear impacts to deep-sea coral habitats in the Bering Sea.

## Pacific

- EFH 5 year reviews: Currently review each FMP individually. See Cross-FMP Initiative below.
- Groundfish EFH review is undergoing a public process:
  - Phase I: Solicited new information and data relevant to groundfish habitat
  - Phase II: Solicited proposals to modify EFH descriptions and any necessary fishery management measures based on new information; determined whether there is sufficient new information to move to Phase 3 (consider changes to groundfish EFH).
  - Phase III: Evaluate the effectiveness of existing EFH habitat closures and scope alternatives to modify EFH.
- Fishery Ecosystem Plan developed in 2013. Provides for annual reporting on the status of environmental conditions within the California Current Ecosystem. Also includes several ecosystem-based fisheries management initiatives, some of which focus on habitat:
  - Unmanaged forage fish initiative: Council is considering options to formally protect some forage fish species not currently managed under an FMP.

- Protect forage species as a component of feeding habitat in a managed species' EFH description.
    - Update the list of fisheries to more accurately reflect current fisheries and prevent new fisheries from developing.
    - Prohibiting harvest of forage species.
  - Cross-FMP EFH initiative
    - Integrate work between FMPs in future 5-year EFH review processes.
    - Integrate spatial-management policies and assessments across FMPs.
- Habitat Committee:
  - Discusses specific projects that would adversely affect EFH and brings to Council's attention when necessary.
  - Sometimes provide written comment. A few example projects that Council has engaged in include:
    - Projects that impact salmon freshwater and estuarine habitat.
    - Native and non-native shellfish aquaculture facility in Federal waters.
    - Wind farm pilot project that may require cable installation through an area with rocky reef habitat.

**South Atlantic**

- Continued mapping, habitat characterization, and monitoring of reef fish populations in HAPCs and other managed areas to assess their effectiveness.
- SAFMC Habitat and Ecosystem Atlas allow users to view a variety of map services supporting fishery management issues in one viewer, including EFH, HAPCs, fisheries monitoring and assessment data, managed area boundaries, habitat and bathymetry data, and nautical charts.
- Developed Fishery Ecosystem Plan that serves as source document on the South Atlantic ecosystem and will be updated periodically.
- Amendments/regulatory actions:
  - Comprehensive Ecosystem-Based Amendment amends all FMPs and implements other ecosystem-based management actions (i.e., EFH identification and protection, deep-sea coral protection, bycatch measures).
  - Coral Amendment 8 awaiting Secretarial approval. Will expand the boundaries of several Coral-HAPCs based on current research observations of deep coral resources outside and adjacent to some of the current HAPCs.
  - The Council is developing Regulatory Amendment 17, which considers alternatives for MPAs (reorientation of existing MPAs and new MPAs) that would help diminish bycatch of other commercially important species.
- Committees and advisory bodies:
  - Habitat and Environmental Protection Committee; Habitat Advisory Panel, and Coral Habitat Advisory Panel
    - Review and revise habitat policies, including on aquaculture, instream flows, SAV, invasive exotic species, artificial reefs, energy exploration and development, and beach dredging and filling.
  - Ecosystem-Based Management Committee

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| <b>Western Pacific</b>       | <ul style="list-style-type: none"><li>• EFH 5 year review:<ul style="list-style-type: none"><li>– Finalizing amendment for refinement of Hawaii Bottomfish EFH</li><li>– Ongoing EFH review for all management unit species region-wide (except Bottomfish in Hawaii)</li></ul></li><li>• Works with PIRO to address non-fishing impacts to EFH.</li><li>• Preparing for coral listing and protecting critical habitat for listed species.</li><li>• Involvement in planning deep-sea coral research priorities for FY15.</li><li>• Habitat conservation outreach to states and public</li><br/><li>• <u>Committees and advisory bodies:</u><ul style="list-style-type: none"><li>– Initiating Marine Planning and Climate Change Committee</li></ul></li></ul> |
| <b>Cross-council efforts</b> | <ul style="list-style-type: none"><li>• MOU for deep-sea coral conservation between the SAFMC, MAFMC, and NEFMC</li><li>• March 19-21, 2014 Climate Change and Fisheries Governance Workshop to establish a shared frame of reference regarding the potential impacts of climate change on marine fisheries governance (MAFMC, SAFMC, NEFMC, ASMFC, FLSF, and NMFS).</li></ul>  |