Regional Council Approaches to the Identification and Protection of Habitat Areas of Particular Concern

by

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The 1996 Amendments to the Magnuson-Stevens Fishery Conservation and Management Act focused increased attention on the importance of habitat protection to achieving sustainable fisheries. Congress stated in the Act, "one of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats" (16 U.S.C. 1801). Based on this finding, Congress required Councils to describe and identify essential fish habitat (EFH), defined as those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity, and mandated that regional Fishery Management Councils (Councils) minimize to the extent practicable the adverse effects of fishing on EFH and identify other actions to conserve and enhance EFH.

The National Marine Fisheries Service (NMFS) developed regulations (50 CFR 600 Subpart J; 62 FR 665531) to guide Councils in the implementation of the EFH provisions. The EFH regulations encourage Councils to identify Habitat Areas of Particular Concern (HAPCs) within areas designated as EFH to focus conservation priorities on specific habitat areas that play a particularly important role in the life cycles of federally managed fish species. The intent of NMFS in encouraging the designation of HAPCs is to help focus conservation efforts on localized areas that are vulnerable to degradation or especially important ecologically. HAPCs should be subsets of the total area necessary to support healthy stocks of fish throughout all of their life stages. Healthy populations of fish require not only the relatively small habitats identified as HAPCs, but also other suitable areas that provide habitat functions that support larger numbers of fish needed to support sustainable fisheries and a healthy ecosystem.

The EFH regulations require that designation of specific HAPCs be based on one or more of the following considerations:

- a. the importance of the ecological function provided by the habitat;
- b. the extent to which the habitat is sensitive to human-induced environmental degradation;
- c. whether and to what extent development activities are or will be stressing the habitat; and
- d. the rarity of the habitat type.

Based on these criteria, seven of the eight Councils have designated HAPCs as of early 2001. Councils approached HAPC designation in different ways. Some designated discrete habitat areas as HAPCs, while others broadly designated all areas of a specific habitat type as HAPCs. Some Councils designated HAPCs for all of the managed species in their jurisdictions, and others only designated HAPCs for particular species or life stages.

This report identifies the areas designated as HAPCs in each region, analyzes different Council approaches to HAPC designations, summarizes Councils "progress with respect to HAPCs subsequent to the initial designations, and offers recommendations for future HAPC designations. The purpose of this report is to share information and allow each Council (and interested stakeholders) to benefit from others" experiences with HAPCs.

A. Initial Council HAPC Designations

South Atlantic Fishery Management Council (SAFMC)

The SAFMC designated HAPCs in their EFH Comprehensive Amendment (Amendment; 1998). HAPCs were designated for all species covered under a given fishery management plan (FMP) rather than for individual species. The Council designated HAPCs broadly to include both general habitat types (e.g., seagrass habitat) and areas of ecological importance (e.g., the Charleston Bump) that are already identified in the FMP. The Amendment does not contain maps or geographic coordinates for the designated HAPCs.

The Amendment justifies each HAPC designation by stating that the designations will enable the Council to protect EFH effectively and take timely actions to manage fisheries in HAPCs when necessary. The Amendment asserts that HAPC designations may prevent further decreases in biological productivity for each species and will likely lead to long-term economic benefits to society. It also says that, while the designations in and of themselves will not likely lead to social and/or economic impacts on fishermen, actions resulting from the designations could. Although the Amendment does not directly reference the four HAPC criteria, justifications addressed each of the criteria.

The Council has not developed specific management measures for the areas designated as HAPCs other than for the Oculina Bank HAPC, where the designation and protective measures pre-dated the EFH provisions.¹ More information on the importance of some of these designations to managed species is included in Section 3.0 of the Habitat Plan, as referenced by the Amendment.

The SAFMC designated the following areas as HAPCs for the species within its jurisdiction:

Penaeid shrimp

- all coastal inlets
- all state-designated nursery habitats of particular importance to shrimp
- state-identified overwintering areas

Red drum

• all coastal inlets

¹The South Atlantic and Gulf of Mexico Fishery Management Councils coined the concept of HAPCs prior to the enactment of the essential fish habitat provisions with the joint establishment of the Oculina Bank, Florida Middle Ground, and West and East Flower Garden Banks Habitat Areas of Particular Concern in 1984 in the Coral FMP. The Coral FMP, which designated the HAPCs and created applicable management measures, defined HAPCs as Aareas of special biological significance.[®] Thus the definition of HAPC used by these Councils in 1984 differs from the one contained in the EFH regulations.

- all state-designated nursery habitats of particular importance to red drum
- documented sites of spawning aggregations in NC, SC, GA, and FL described in the Habitat Plan
- other spawning areas identified in the future
- and SAV-identified areas

Snapper-grouper management unit:

- medium to high profile offshore hard bottoms where spawning normally occurs
- areas of known or likely spawning aggregations
- nearshore hard bottom areas
- the Point
- the Ten Fathom Ledge
- Big Rock
- the Charleston Bump
- mangrove habitat
- seagrass habitat
- oyster/shell habitat
- all coastal inlets
- all state-designated nursery habitats of particular importance to snapper grouper
- pelagic and benthic *Sargassum*
- Hoyt Hills for wreckfish
- the Oculina Bank Habitat Area of Particular Concern
- All hermatypic (type involved in reef formation) coral habitats and reefs
- Manganese outcroppings on the Blake Plateau
- Council-designated Artificial Reef Special Management Zones (SMZs)

Coastal Migratory Pelagic Species

- sandy shoals of Cape Lookout, Cape Fear, and Cape Hatteras from the shore to the ends of the respective shoals (shoreward of the Gulf stream)
- the Point
- the Ten-Fathom Ledge
- Big Rock
- the Charleston Bump
- Hurl Rocks
- the Point off Jupiter Inlet
- Worm reefs off the central east coast of Florida
- nearshore hard bottom south of Cape Canaveral
- the Hump off Islamorada, Florida
- the Marathon Hump off Marathon, Florida
- the "Wall" off the Florida Keys
- Pelagic *sargassum*

• Atlantic coast estuaries with high numbers of Spanish mackerel and cobia (abundance based on ELMR data) including Bogue Sound, New River, and Broad River

Golden Crab

The Comprehensive EFH amendment does not identify HAPCs for golden crab due to insufficient knowledge about the biology of golden crabs and the resulting inability to identify spawning and nursery areas.

Spiny Lobster

- Florida Bay
- Biscayne Bay
- Card Sound
- Coral/hard bottom habitat from Jupiter Inlet, Florida through the Dry Tortugas, Florida

Coral, coral reefs, and live/hard bottom habitat

- 10-Fathom Ledge
- Big Rock
- the Point
- Hurl Rocks
- the Charleston Bump
- Gray's Reef National Marine Sanctuary
- Worm reefs off the central east coast of Florida
- Oculina Banks off east coast of Florida from Ft. Pierce to Cape Canveral
- Nearshore hard bottom off east coast of Florida from Cape Canaveral to Broward County
- Offshore hard bottom off the east coast of Florida from Palm Beach County to Fowey Rocks
- Biscayne Bay
- Biscayne National Park
- the Florida Keys National Marine Sanctuary

Gulf of Mexico Fishery Management Council (GMFMC)

The GMFMC designated HAPCs in the Gulf of Mexico Generic EFH Amendment (1998; Amendment). In general, the GMFMC did not designate HAPCs for individual species; rather, the Council identified several HAPCs to benefit all FMP-managed species under Council jurisdiction. The Council identified as HAPCs certain bays, estuaries, and sanctuaries that had previously been identified in the FMP as important areas for other purposes. These areas fall under three main habitat types:

- 1) Nearshore intertidal and estuarine habitats with particular substrates (including oyster reefs and mud flats) that provide food and shelter;
- 2) Offshore areas with high-value/high-diversity substrates (e.g. coral); and
- 3) Marine and estuarine habitat used for migration, spawning, and rearing of fish and shellfish.

The Amendment contains general ecological justifications for each HAPC designation and generally describes the physical characteristics of each. Only in a few cases do the HAPC descriptions make links to particular species (see below). The Amendment does not propose any special regulations for the areas designated as HAPCs. The Amendment does not contain maps of the designated HAPCs, but includes the geographic coordinates for certain sanctuaries and other resource management areas that are identified as HAPCs.

Specific HAPC designations and the reasons for their designation (as described in the Generic EFH Amendment (1998)) are as follows:

- Florida Keys National Marine Sanctuary resources form the foundation for the commercial fishing- and tourism-based economies vital to Florida.
- Florida Bay provides important habitat for spiny lobster, pink shrimp, and red drum and is currently stressed by algal blooms, anoxia, and SAV mortality.
- Flower Garden Banks National Marine Sanctuary serves as a reservoir of shallow water for Caribbean reef fishes and invertebrates. Designated as HAPC for coral and coral reefs.
- Apalachicola National Estuarine Research Reserve includes important habitats for saltwater fish and shellfish.
- Rookery Bay National Estuarine Research Reserve includes mangrove forests and shallow bay waters that provide important fish habitats.
- Weeks Bay National Estuarine Research Reserve provides critical nursery habitats for fish and shellfish.
- Grand Bay, MS encompasses estuarine tidal marsh, shallow-water open bay, wet pine savannah, and coastal swamp habitats.
- Florida Middle Grounds the most important coral area in the northeastern Gulf of Mexico. Designated as HAPC for coral and coral reefs, also linked to red snapper and grouper habitat needs.
- Dry Tortugas contains pristine reef area. Designated as HAPC for coral and coral reefs.

The Amendment discusses the relevance of each of the designations regarding the four HAPC criteria. The majority of the HAPCs meet at least three of the four criteria.

Caribbean Fishery Management Council (CFMC)

In the CFMC EFH Generic Amendment (Amendment; 1998), the Council acknowledged the scarcity of information available for the life history characteristics of their managed species, and thus generically designated habitat types, including estuaries in Puerto Rico and the U.S. Virgin Islands (stating their importance as nursery grounds), nearshore reefs and other hard bottom structures, based on ecological function. The Council also designated a portion of the U.S. Virgin Islands known as the "Hind Bank," which at the time of its designation already included a no-take marine conservation district to protect red hind spawning aggregations. These HAPCs fulfill the first HAPC criterion - important ecological function. The Amendment does not relate these designations to specific managed species, and does not

propose any special regulations for the areas designated as HAPCs. The Amendment does not contain maps or geographic coordinates of the designated HAPCs. Pacific Fishery Management Council (PFMC)

The PFMC has not yet designated any areas as HAPCs, but has begun laying the groundwork for future HAPC designations.

North Pacific Fishery Management Council (NPFMC)

In the NPFMC EFH Amendments (Amendments 1998), the Council designated three habitat types as HAPCs: 1) living substrates in shallow waters, 2) living substrates in deep waters, and 3) freshwater areas used by anadromous fish. The Amendments contain detailed descriptions of the physical characteristics of the shallow and deep living substrates and the importance of these areas to specific managed species. The designations for freshwater areas include streams, lakes, and other freshwater areas used by anadromous species, and point out the importance of designating freshwater areas in urban sites where human disturbance is high. The Amendments do not propose any special regulations for the areas designated as HAPCs. The Amendment does not contain maps or geographic coordinates of the designated HAPCs.

Shallow water living substrates are further described by the Amendments as nearshore areas of intertidal and submerged vegetation, rock, and other substrates such as eelgrass beds, rockweed, and kelp. They are described as important feeding and rearing habitats for groundfish species and important spawning areas for Atka mackerel and yellowfin sole. Additionally, the Amendments characterize these areas as vulnerable to shore-based activities and as relatively rare. The importance of this habitat type to king crab and herring reproduction and Pacific salmon migration are also noted. Therefore, this habitat type meets all four of the criteria in the EFH regulations for designating HAPCs.

Deep water living substrates are further described as offshore areas of high micro habitat diversity, such as rich epifaunal communities (e.g., coral, anemones) or areas with cobble bottom. The Amendments state the importance of this habitat type to groundfish species in particular, specifically noting the importance of coral as vertical structure that provides protection and shelter. The sensitivity to human-induced environmental disturbance (fishing and non-fishing) and relative rarity of coral habitat are mentioned. Additionally, the Amendments point out that deep water living substrates are commonly impacted by fishing activities. Therefore, this habitat type meets all four of the HAPC criteria contained in the EFH regulations.

Although not considered an HAPC, in 1998 the NPFMC identified a rocky bottom area known as the Cape Edgecomb Pinnacles as a very productive and important habitat, and implemented restrictions on mobile fishing gear to protect that area.

Western Pacific Fishery Management Council (WPFMC)

The WPFMC designated separate HAPCs for each of its management unit species: bottomfish management unit species, pelagic management unit species, crustacean management unit species, and precious coral management unit species. HAPCs were designated on the basis of habitat types for each unit species. The areas selected are geographically defined, particularly by depth contour, and the WPFMC EFH Amendments (1998) contain maps of each HAPC.

The Amendments justify each designation by stating that these areas are designated based on the ecological function they provide, the rarity of the habitat, and the habitat=s susceptibility to human disturbance. Thus, the HAPCs fulfill at least three of the four HAPC criteria. The Amendments do not propose any special regulations for the areas designated as HAPCs.

The WPFMC designated the following areas/habitat types for the managed species in its jurisdiction:

Bottomfish Management Unit Species

- all escarpments/slopes between 40-280 m
- three known areas of juvenile opakapaka (no further description provided)

Pelagic Management Unit Species

- the water column down to 1,000 m that lies above seamounts (the FMP notes the importance of seamounts as sites of high biological productivity and mentions that these areas are manganese-rich and may be proposed as mining sites)
- banks within the EEZ shallower than 2,000 m

Crustacean Management Unit Species

• all banks with summits less than 30 m in the Northwestern Hawaiian Islands (the FMP explains that these areas provide critical recruitment sites for spiny lobster)

Precious Coral Management Unit Species

- six precious coral beds (Makapuu, Wespac, and Brooks, which may provide important monk seal foraging habitat, all mentioned)
- Auau Channel (designated for black coral protection)

New England Fishery Management Council (NEFMC)

The NEFMC designated HAPCs for two of its managed species - Atlantic cod and Atlantic salmon - based on a review of scientific literature describing species-habitat associations. The Council designated a gravel/cobble bottom area on Georges Bank as an HAPC for juvenile Atlantic cod and eleven Maine rivers as HAPC for juvenile Atlantic salmon. The designations are discrete geographic areas that are depicted in maps in the NEFMC EFH Amendments (1998). The Amendments do not propose any special regulations for the areas designated as HAPCs.

The EFH Amendments explain the importance of gravel/cobble substrate to the survival of juvenile cod. These areas provide space for newly settled juvenile cod to find shelter from predation, helping to decrease the typically high mortality rates associated with this life stage. They are also rich in prey items such as bryozoans, hydroids, and worm tubes, and therefore provide an important food source for juvenile cod. The Amendments explain that for these reasons, this HAPC designation meets the first criterion for HAPC designationCimportant ecological function. Additionally, the Amendments acknowledge that these areas are vulnerable to bottom fishing, such as scallop dredging and other fishing practices that use mobile fishing gear, which can reduce habitat structural complexity. For this reason, the designation fulfills the second HAPC designation criterionCthe habitat is sensitive to human-induced environmental degradation.

The NEFMC designated the Dennys, Machias, East Machias, Pleasant, Narraguagus, Ducktrap, Kennebec, Penobscot, St. Croix, Tunk Stream, and Sheepscot Rivers as HAPCs for Atlantic salmon. These support the last remaining individuals of a distinct population segment of Atlantic salmon. These rivers are extremely vulnerable to human-induced threats. Therefore, these HAPC designations fulfill the first two criteria for HAPC designationCimportant ecological function and sensitivity to human-induced environment degradation.

Mid-Atlantic Fishery Management Council (MAFMC)

The MAFMC designated HAPCs for summer flounder (MAFMC 1998a). The Council did not identify HAPCs for other species because they decided they not have enough information to link habitat type with recruitment success (MAFMC 1998b, 1998c, 1998d; MAFMC and NEFMC 1999).

The MAFMC designated submerged aquatic vegetation (SAV) and macroalgae beds in nursery habitats as HAPCs for juvenile and larval-stage summer flounder in particular. The Amendment cites the Atlantic States Marine Fisheries Commission=s definition of SAV as Arooted, vascular, flowering plants that, except for some flowering structures, live and grow below the surface.@ The FMP explains that macroalgae was designated because it serves a similar ecological function.

The EFH Amendment notes the importance of these habitat types in providing summer flounder shelter from predators and prey. Therefore, the HAPC meets the first HAPC criterionCimportant ecological function.

The Council did not propose any special regulations for the areas designated as HAPCs. The Amendment implies that the reason for this is that the majority of the designation is in state waters, where the Council does not have the authority to regulate fishing. The Amendment encourages states to take the measures necessary to protect HAPCs and acknowledges that the designation will help heighten attention for SAV areas during the consultation process. The Amendment does not contain maps or geographic coordinates of the designated HAPCs. Atlantic Highly Migratory Species (HMS)

NMFS designated HAPCs for sandbar shark, but not for any other Atlantic highly migratory species due to a general lack of scientific information detailing HMS-habitat associations.

The Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (NMFS 1999) designated Aimportant nursery and pupping grounds@ in several Atlantic coast estuaries as HAPCs for sandbar sharks. The FMP states specifically that HAPCs have been identified in nursery and pupping grounds in shallow areas and the mouth of the Great Bay, NJ, lower and middle Delaware Bay, lower Chesapeake Bay, MD, and near the Outer Banks, NC in areas of Pamlico Sound adjacent to Hatteras and Ocracoke Islands and offshore those islands. The HAPC fulfills at least the first of the HAPC criterion. The Amendment contains a map of the approximate HAPC locations.

B. Council HAPC Next Steps

Because HAPCs help Councils identify priority areas for conservation, several Councils have invested time in refining their use of HAPCs. For example, several Councils have taken additional steps by establishing formal processes by which HAPCs should be designated, outlining ways to engage stakeholders in HAPC designation, or further splitting HAPC criteria into distinct management categories. The following section summarizes the Anext steps@ taken by each Council to further systematize their use of HAPCs. Councils may find this information helpful when undertaking future HAPC designation and management efforts.

North Pacific Fishery Management Council

The NPFMC has been actively refining its use of HAPCs since its initial HAPC designations in 1998. Specifically, the Council has proposed the designation of new HAPCs, considered the application of management measures for HAPCs, created additional HAPC management/purpose categories, and developed proposals to establish a comprehensive approach and iterative process for stakeholder involvement in future HAPC identification and designation efforts. The Council produced a discussion paper dated May 31, 2000 entitled, "The Stakeholder Process and Identification of Habitat Areas of Particular Concern," which describes its actions and ideas surrounding further use of HAPCs. Elements of the discussion paper are described below.

Additional HAPC Designations

In its initial designations, the Council identified habitat types (living substrates in shallow waters, living substrates in deep waters, and freshwater areas used by anadromous fish) as HAPCs. The Council is now attempting to refine these designations further by using available information to identify the specific geographic locations of certain HAPC biota. Among the proposed specific areas under consideration for HAPC designation are: a deep basin in Prince William Sound, the Chirikov Basin north of St. Lawrence Island, and the red king crab bottom trawl closure areas around Kodiak Island. The Council is also considering designating additional habitat types as HAPCs, including seamounts and pinnacles, the ice edge, the shelf break, and biologically-consolidated fine-grained sediments.

HAPC Management Measures

The NPFMC proposed two primary management measures to protect HAPCs: prohibiting directed fishing for certain HAPC biota (specifically, corals and sponges) and establishing marine protected areas where gorgonian corals are found in abundance. The Council adopted the first of the two management measures at their meeting in April 2000, effectively preventing the development of commercial fisheries for corals and sponges. HAPC prohibited species can be retained for personal use, but their sale, barter, and trade are prohibited. This action will be incorporated into the Bering Sea and Gulf of Alaska Groundfish FMPs. The Council has not yet taken final action on the second management measure.

HAPC Management Categories

The NPFMC Ecosystem Committee has proposed that HAPC designations be split into three distinct management categories to help the Council define the appropriate framework for HAPC analysis and stakeholder involvement. These categories include: keystone areas, vulnerable areas, and species specific areas. Keystone areas are those HAPCs that contribute to high fish productivity and that contain properties that maintain critical ecosystem processes (e.g., the Prince William Sound=s deep basin and Bering Sea ice edge). Vulnerable areas are those HAPCs that have characteristics that make them susceptible to impacts from fishing activities (e.g., areas of high gorgonian coral abundance). Species specific areas are those HAPCs that are critical to a life stage of a depleted, overfished, threatened, or endangered species (e.g., the Bristol Bay Closure for red king crab). This process is in the early stages of development and will be reviewed during the stakeholder process.

Options for HAPC Designation and Stakeholder Involvement Process

The NPFMC has proposed a four-step framework for future HAPC designations that involves: 1) the solicitation of proposals for habitat types or areas for HAPC designation during the normal amendment proposal cycle; 2) preliminary review of proposals by appropriate advisory committees; 3) Council

review of HAPC proposals and determination of further analysis needs; and 4) initiation of a stakeholder input process for those proposals in need of public review.

The discussion paper acknowledges that stakeholder involvement benefits the resource management process by enhancing information bases with local knowledge and expertise, increasing the sense of habitat protection responsibility among members of the public, and engaging members of the public in resource regulation and enforcement. The Council is considering four options to engage stakeholders in the process of reviewing proposals. These options include: 1) soliciting public input and feedback via the traditional Council/Advisory Committee process (i.e., the status quo option); 2) establishing a sponsorship program whereby organizations/individuals nominate HAPCs, via a user group consensus process, and act as their sponsor by entering into a long-term partnering arrangement for managing the HAPC; 3) sending staff out to local communities to conduct public meetings to solicit input; and 4) establishing an intermediary working group, composed of a diversity of stakeholder groups/individuals (e.g., commercial and recreational fishers, environmental groups, etc.) to serve as a liaison between the Council and local communities.

The NPFMC has begun Step 4 of the framework process (i.e., initiation of stakeholder input). Public meetings were held in January 2001 in Sitka and Yakutat to engage stakeholders in information exchange. Additional public meetings will follow in Kenai, Kodiak and Unalaska. Also, an intermediary working group has been established that includes local fishers, local community members, academia, a marine conservation group, and NMFS Regional and Science Center staff.

MAFMC:

The MAFMC adopted a Tilefish FMP that designates HAPC for juvenile and adult tilefish. The designation would include substrate between the 250 and 1200 ft isobaths within statistical areas 616 and 537 off southern New England and the New York Bight. In recent years 90% of the tilefish landings have occurred from these two areas. NMFS approved the FMP in May 2001. WPFMC:

The WPFMC is currently developing EFH and HAPC designations for the Coral Reef Ecosystem FMP. The draft proposal for the designations is not available for circulation at this time. Because of the extensive EFH and HAPC designations made by their original FMP action, once the coral reef designations are in place, WPFMC does not anticipate the need for further designations (or modifications to existing designations) unless new information becomes available.

PFMC:

NMFS, in conjunction with the PFMC, is currently developing a process for identifying, evaluating and designating HAPCs. The process has been reviewed by the Fishing and Habitat Committees of the PFMC, and is anticipated to be presented to the PFMC in Spring 2001. The proposed process

includes an annual collection of HAPC proposals from the PFMC, the fishing community, conservation organizations, and the general public. The proposals would be forwarded to an HAPC Review Group, composed of approximately 14 scientists from a wide range of locations and disciplines, including NOAA (NMFS, NOS), state agencies, and academia (biologists, geologists). The Review Group would discuss each proposal and apply ratings (i.e., low, medium, high) relative to each of the four HAPC criteria in the EFH regulations (50 CFR 600.815(a)(9)). These criteria have been further detailed by NMFS in the process proposal. Based on the criteria ratings, NMFS would forward recommendations to the PFMC Habitat Steering Group. These recommendations would then be made available for public comment. After receiving and considering all public comment, the Habitat Steering Group would submit proposed HAPC designations to the PFMC for designation through the normal FMP process.

If this process is adopted by the PFMC, NMFS foresees using kelp bed habitat as the first HAPC proposal to be reviewed through the process.

NEFMC:

In May 2000, the NEFMC adopted a structured process for identifying, evaluating and designating HAPCs. The process includes an annual Request for Proposals (RFP) whereby the Council requests HAPC proposals from the fishing industry, scientific community, conservation organizations and the general public. The RFP will include an overview of the EFH and HAPC designation process, a summary of existing HAPCs, and the criteria and minimum standards for evaluating and designating a new HAPC. The NEFMC EFH Technical Team will complete a technical review of all proposals. The first step in the technical review process is an evaluation of whether a proposed HAPC meets more than one of the criteria established under the Interim Final Rule and whether the available information justifies the designation. If the proposal passes the first evaluation, the second step is an evaluation of whether the candidate HAPC should have specific fishery managment measures associated with its designation. The EFH Technical Team will forward the results of their review to the NEFMC Habitat Committee. The Habitat Committee will review the proposals and the information provided by the EFH Technical Team and forward their recommendations to the NEFMC for approval or disapproval.

The EFH Technical Team is currently preparing an HAPC proposal for juvenile Atlantic cod in the Gulf of Maine.

CFMC: No further action.

<u>GMFMC</u>: No further action.

SAFMC: No further action.

C. Recommendations for the Future Use of HAPC:

This section provides recommendations for the designation, refinement and use of HAPCs. For some species, existing gaps in scientific information may preclude incorporation of some or all of the following recommendations. These recommendations are intended to suggest useful ways to apply the concept of HAPCs as a means to identify and conserve especially valuable and/or vulnerable portions of EFH.

• HAPCs should have geographically defined boundaries.

Where possible, depending on the availability of information, Councils should strive to use geographically specific information to identify HAPCs. This information should be provided in fishery management plans, preferably in maps and in text or tables that indicate the specific geographic coordinates (latitude/longitude) for each HAPC. By providing information on the locations of HAPCs, it is easier for Councils to consider and apply management measures to these areas for their protection and to demonstrate to the public where management measures to protect HAPCs start and end. Additionally, information on the precise locations of HAPCs will help NMFS and Councils provide EFH Conservation Recommendations to action agencies to avoid and/or mitigate adverse impacts to these habitat areas from activities other than fishing. Furthermore, by identifying HAPC locations and providing this information in FMPs and other public information outlets (e.g., web sites), members of the public can learn more about HAPCs and avoid causing harm to them.

• Councils should avoid designating sweeping areas as HAPCs.

HAPC designations should help Councils and NMFS identify priority areas within EFH for taking action to protect habitat, avoid impacts, and/or mitigate impacts. To the extent possible, Councils should strive to identify specific locations within a particular habitat type, ecosystem, or already designated area (e.g., National Marine Sanctuary) that warrant the additional attention provided by an HAPC designation. For instance, rather than designating all hard bottom habitat in a given area as HAPC, to the extent that sufficient information is available, Councils should select those hard bottom areas that deserve special attention based on the four criteria for HAPCs. This will help demonstrate that areas within a particular habitat type are not necessarily equal in fisheries productivity value, for instance, and thus do not necessarily warrant the same level of attention and protection. Additionally, fishers, action agencies, and members of the general public may be more amenable to taking steps to ensure the conservation of HAPCs that are defined more discretely.

• HAPC designations should, where possible, be based on a particular species/management unit life stage.

HAPC designations are most useful when they are linked to the biological and ecological needs of particular species. The needs of managed species drive the entire EFH identification, designation, and protection process. By linking HAPC designations to the requirements of specific managed species and providing this information in FMPs, managers can make informed decisions about how to develop and apply management measures to best manage/protect HAPCs to meet the requirements of fish species and promote sustainable fisheries.

• The refinement of current HAPCs and development of future HAPCs should be an ongoing process.

Councils should adopt a systematic approach for identifying and evaluating possible HAPCs and, if necessary, modifying existing HAPCs in an efficient and comprehensive manner. The process should include a specific timeline, such as an annual cycle, so that as new proposals and/or information are acquired, HAPCs can be designated and/or modified accordingly within a reasonable time frame. The process should also allow input from all interest groups (i.e., fishing communities, academia, conservation organizations, Federal and non Federal agencies, etc.) and the general public. This will ensure that a broad array of information and perspectives are evaluated, and hopefully will help to gain increased participation and support for EFH and HAPCs.

• FMPs should contain detailed descriptions of HAPCs.

FMPs should include a thorough discussion of the analysis that occurred during the HAPC decision process, as well as a detailed description of the HAPC itself. For example, the FMP should provide :

- a detailed discussion of the relevant HAPC criteria with regards to each proposed HAPC
- a detailed description of the habitat within the HAPC and the rationale for why it deserves a special designation (based on the criteria evaluation),
- an assessment of whether or not fishery management measures are appropriate,
- a description of all management measures considered during the analysis, and
- any HAPC-specific recommendations to minimize the effects of non-fishing activities.

Including the above information in the FMP will provide interest groups and the general public with a better understanding of the reasons for establishing the HAPC. This should help to gain support for the HAPC process, and ultimately lead to Federal and state agencies, as well as the general public, taking measures to conserve and protect HAPCs.

References

Caribbean Fishery Management Council (CFMC). 1998. *Essential Fish Habitat (EFH) Generic Amendment to the Fishery Management Plans of the U.S. Caribbean: Including a Draft Environmental Impact Statement, Vol. I.* San Juan: CFMC.

Gulf of Mexico Fishery Management Council (GMFMC). 1998. Generic Amendment for Addressing Essential Fish Habitat Requirements in the Following Fishery Management Plans of the Gulf of Mexico: Shrimp Fishery of the Gulf of Mexico, United States Waters; Red Drum Fishery of the Gulf of Mexico; Reef Fish Fishery of the Gulf of Mexico; Coastal Migratory Pelagic Resources (Mackerels) in the Gulf of Mexico and South Atlantic; Stone Crab Fishery of the Gulf of Mexico; Spiny Lobster Fishery in the Gulf of Mexico and South Atlantic; Coral and Coral Reefs of the Gulf of Mexico. Tampa: GMFMC.

Mid-Atlantic Fishery Management Council (MAFMC). 1998a. Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover: MAFMC.

MAFMC. 1998b. Amendment 12 to the Atlantic Surfclam and Ocean Quahog Fishery Management Plan. Dover: MAFMC.

MAFMC. 1998c. Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan. Dover: MAFMC.

MAFMC. 1998d. Amendment 1 to the Bluefish Fishery Management Plan. Dover: MAFMC.

MAFMC and New England Fishery Management Council (NEFMC). 1999. Spiny Dogfish Fishery Management Plan. Dover: MAFMC.

National Marine Fisheries Service (NMFS). 1999. *Final Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks, Vol. II.* Washington, D.C.: NMFS.

NMFS. *Essential Fish Habitat Regulations (Interim Final Rule)*. 1997. 50 CFR 600 (62 FR 665531).

NEFMC. 1998. Final Amendment #11 to the Northeast Multispecies Fishery Management Plan, Amendment #9 to the Atlantic Sea Scallop Fishery Management Council, Amendment #1 to the Monkfish Fishery Management Plan, Amendment #1 to the Atlantic Salmon Fishery Management Plan, Components of the Proposed Atlantic Herring Fishery Management Plan for Essential Fish Habitat: Incorporating the Environmental Assessment. Newburyport: NEFMC.

North Pacific Fishery Management Council (NPFMC). 1998. Draft Environmental Assessment for Amendment 55 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea

and Aleutian Islands Area; Amendment 55 to the Fishery Management Plan for Groundfish of the Gulf of Alaska; Amendment 8 to the Fishery Management Plan for the King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands; Amendment 5 to the Fishery Management Plan for the Scallop Fisheries off Alaska; Amendment 5 to the Fishery Management Plan for Salmon in the EEZ off the Coast of Alaska: Essential Fish Habitat. Anchorage: NPFMC.

South Atlantic Fishery Management Council (SAFMC). 1998. Final Comprehensive Amendment Addressing Essential Fish Habitat in the Fishery Management Plans of the South Atlantic Region: Amendment 3 to the Shrimp Fishery Management Plan; Amendment 1 to the Red Drum Fishery Management Plan; Amendment 10 to the Snapper Grouper Fishery Management Plan; Amendment 10 to the Coastal Migratory Pelagics Fishery Management Plan; Amendment 1 to the Golden Crab Fishery Management Plan; Amendment 5 to the Spiny Lobster Fishery Management Plan; and Amendment 4 to the Coral, Coral Reefs, and Live/Hard Bottom Habitat Fishery Management Plan (Including Final EA/SEIS, RIR & SIA/FIS). Charleston: SAFMC.

United States Congress. *Magnuson-Stevens Fishery Conservation and Management Act* (16 U.S.C. 1801 et seq.). 1996.

Western Pacific Fishery Management Council (WPFMC). 1998. Magnuson-Stevens Act Definitions and Required Provisions: Amendment 6 to the Bottomfish and Seamount Groundfish Fisheries Management Plan; Amendment 8 to the Pelagic Fisheries Management Plan; Amendment 10 to the Crustaceans Fisheries Management Plan; Amendment 4 to the Precious Corals Fisheries Management Plan. Honolulu: WPFMC.