

Habitat Areas of Particular Concern (HAPC) with Essential Fish Habitat (EFH)

HAPC Process Document

September 2010

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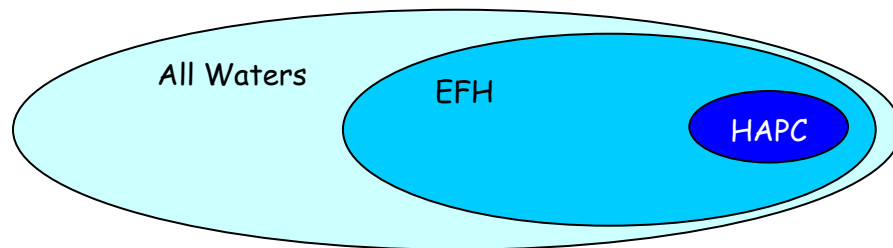
Habitat Areas of Particular (HAPC) within Essential Fish Habitat (EFH) are areas where fisheries management identifies a need to conserve sensitive, rare habitats from anthropogenic activities such as fishing practices or developmental stress. The following outlines the history of HAPC within the NPFMC and details the HAPC process.



*North Pacific Fishery Management Council
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Introduction and Background

Essential Fish Habitat (EFH) provisions provide a means for the Council to identify HAPCs [50 CFR 600.815(a)(8)] within Fishery Management Plans (FMP). Specific to fishery actions, HAPCs are areas within EFH that are ecologically important, sensitive to disturbance, or rare:



In 2005, the Council formally revised its approach to the designation of HAPCs by adopting a site-based approach as compared to the three habitat types previously identified (living substrate in shallow waters, living substrate in deeper waters, and freshwater anadromous fish streams). To date, there has been one HAPC nomination process, initiated in October 2003, which resulted in the implementation of several HAPC designations in the Gulf of Alaska and the Aleutian Islands in 2006. For the initial 2003-2004 HAPC process, the Council identified two specific priority areas for HAPC proposals:

1. Seamounts in the exclusive economic zone (EEZ), named on National Oceanic and Atmospheric Administration (NOAA) charts that provide important habitat for managed species.
2. Largely undisturbed, high-relief, long-lived hard coral beds with particular emphasis on those located in the Aleutian Islands that provide habitat for life stages of rockfish or other important managed species.

Additionally, nominations were based on the best available scientific information and included the following features:

1. Sites must have likely or documented presence of Fishery Management Plan (FMP) rockfish species.
2. Sites must be largely undisturbed and occur outside core fishing areas.

The Council received 23 HAPC proposals from six different organizations. The proposals were reviewed by the Plan Teams for ecological merit and by staff to consider management, enforcement, and socioeconomic issues. Ultimately, the Council identified a range of alternatives, staff completed an analysis, and the Council established several new HAPCs. Management measures for these HAPCs were implemented in August 2006 (Figure 1).

Since the Council last initiated a HAPC proposal cycle (in 2003-04), there have been various occasions on which the Council has considered HAPC priorities or candidate sites. In some cases, the Council has directed that these priorities or areas be brought forward for their upcoming consideration of whether to re-initiate a HAPC proposal cycle. During the 2003-04 HAPC proposal cycle, six proposals were received that did not meet the Council's designated priorities at that time. These proposals identified: two sites in the Bering Sea with dense aggregations of soft corals; three deepwater canyons, two in the Bering Sea and one in Prince William Sound; 54 pinnacles in the Gulf of Alaska; 82 pinnacles in the Aleutian Islands; and the Eight Fathom Pinnacle in the Gulf of Alaska. The Council minutes from April 2004 note that these proposals were removed from the current analysis, but were placed on hold for further consideration under the next HAPC cycle. The proposals would be considered "alive" and need not be re-submitted, although it was expected that the submitters would participate in updating and revising their proposals.

In 2006-2007, the Council considered whether to initiate a HAPC proposal process during discussion related to Bering Sea Habitat Conservation. There were two parts to this discussion. First, the Council reviewed the previous HAPC cycle process and decided that a review of process was needed to address Plan Team and public concerns. Some of these concerns included: how the Council assembles proposed HAPC nominations; the need to ensure uniformity in the information provided in the proposals; and the need for better definitions of the HAPC criteria, such as the requirement for 'rarity' of candidate HAPCs.

The Council formally revised the HAPC process to address many of these concerns, and asked the SSC to provide further definition of the HAPC criteria prior to the next Council call for proposals. Secondly, in 2007, the Council considered whether to set a HAPC priority for Bering Sea skate nurseries and/or Bering Sea canyons. A summary of available research on these subjects was prepared for and presented to the Council. Following public input, Plan Team discussion, and SSC review, the Council determined that it would be premature to initiate a call for proposals as there were no identified conservation concerns at that time. These habitat priority types are also brought forward for the Council's upcoming HAPC priority consideration.

In April 2009, the SSC recommended that the Council consider permanently changing the timeline for consideration of HAPC and align it with the EFH 5-year review. Later in June 2009, the Council considered whether to set priorities for identifying HAPCs and re-solicit for HAPC proposals. The Council postponed decision pending further development of the five-year EFH review.

In February 2010, the Council adopted the SSC's recommended revisions to the HAPC criteria after review by the Plan Teams. Finally in April 2010, the NPFMC choose to align the HAPC process with the EFH 5-year review, identify skate nurseries as a priority, and initiate a call for HAPC proposals.

HAPC Considerations and Priorities

The Council calls for HAPC nominations through a proposal process that focuses on specific sites consistent with the HAPC priorities designated by the Council. The Council may designate HAPCs as habitat sites and consider management measures, if needed, to be applied to a habitat feature or features in a specific geographic location. The feature(s), as identified on a map or chart, must meet the considerations established in the Federal regulations, and address identified problems for an FMP species. Proposals must provide clear, specific, and adaptive management objectives. Evaluation and development of HAPC management measures, where appropriate, will be guided by the EFH Final Rule.

A. HAPC Considerations

HAPCs are those areas of special importance that may require additional protection from adverse effects. 50 CFR 600.815(a)(8) provides that FMPs should identify specific types or areas of habitat within EFH as habitat areas of particular concern based on one or more of the following considerations:

- (i) The importance of the ecological function provided by the habitat;
- (ii) The extent to which the habitat is sensitive to human-induced environmental degradation;
- (iii) Whether, and to what extent, development activities are, or will be, stressing the habitat type;
- (iv) The rarity of the habitat type.

The Council will consider HAPCs that meet at least two of the four considerations above; rarity is a mandatory criterion of all HAPC proposals.

B. HAPC Priorities

The Council sets priorities at the onset of each HAPC proposal cycle.

C. HAPC Proposal Cycle

The HAPC cycle is considered by the Council on a five-year cycle, to coincide with the EFH 5 Year Review. Additionally, the Council can initiate the HAPC process at any time if a specific need arises.

D. HAPC Process

The HAPC process initiates when the Council sets priorities. A subsequent request, or call, for HAPC proposals is issued. Any member of the public may submit a HAPC proposal. Potential contributors may include fishery management agencies, other government agencies, scientific and educational institutions, non-governmental organizations, communities, and industry groups. A step-by-step outline is attached (Figure 2).

E. HAPC Call for Proposals

A call for proposals is announced during a Council meeting, published in the Federal Register, and advertised in the Council newsletter and other media such as the Council's website <http://www.fakr.noaa.gov/npfmc/default.htm>. Scientific and technical information on habitat distributions, gear effects, fishery distributions, and economic data are accessible to the public. For example, NMFS' Alaska Region website <http://www.fakr.noaa.gov/> has a number of valuable tools for assessing habitat distributions, understanding ecological importance, and assessing impacts. Information on EFH distribution, living substrate distribution, fishing effort, catch and bycatch data, gear effects, known or estimated recovery times of habitat types, prey species, and freshwater areas used by anadromous fish is provided in the EFH EIS (April 2005). The public will be advised of the rating criteria with the call for proposals (Section III.E).

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F. Contents of HAPC Proposals

HAPC PROPOSAL APPLICATION

Proposer information

Name:
Address:
Affiliation:

Proposal Summary

Title:
Summary: *Single, brief paragraph concisely describing the proposed action*

What habitat is the proposed area intended to protect?:
What FMP species is the proposed area intended to protect?:

Geographic delineation of the proposed HAPC

Include latitude and longitude reference points and delineation on an appropriately-scaled NOAA chart.

Responsiveness to HAPC considerations and Council priorities

Identify how the proposed HAPC addresses the four considerations set out in the EFH guidelines, and the Council's priority habitat type for the 2010 proposal process.

Purpose and objectives

Purpose and need:

Specific objectives for proposal:

Methods to measure progress toward those objectives:

Proposed management measures, if appropriate

Proposed management measures to meet objectives:

Effects

Expected benefits of the proposed HAPC to FMP species:

Identification of fisheries, sectors, stakeholders, and communities who would be affected by the establishment of the proposed HAPC:

Supporting information

Please provide the best available information and/or sources of information to support the objectives of the proposed HAPC and discussion of the expected effects of implementing the proposal, including socioeconomic costs if possible.

HAPC Review Process

A. HAPC Initial Screening

Council staff screen proposals to determine consistency with Council priorities, HAPC criteria, and general adequacy. Staff presents a preliminary report of the screening results to the Council. The Council will determine which of the proposals will be forwarded for the next review step: scientific, socioeconomic, and enforcement review.

B. Scientific Review

The Council refers selected proposals to the Plan Teams (Gulf of Alaska groundfish; Bering Sea/Aleutian Islands groundfish; Bering Sea/Aleutian Islands crab; scallop; and salmon (currently dissolved)). The Plan Teams evaluate the proposals for ecological merit.

There will always be some level of scientific uncertainty in the design of proposed HAPCs and how they meet their stated goals and objectives. Some of this uncertainty may arise because the public will not have access to all relevant scientific information. Recognizing time and staff constraints, however, the staff cannot be expected to fill all the information gaps of proposals. The Council will have to recognize data limitations and uncertainties and weigh precautionary strategies for conserving and enhancing HAPCs while maintaining sustainable fisheries. The review panels may highlight available science and information gaps that may have been overlooked or are not available to the submitter of the HAPC proposal.

C. Socioeconomic Review

Proposals will be reviewed by Council or agency economists for socioeconomic impact. The Magnuson-Stevens Act states that EFH measures are to minimize impacts on EFH “to the extent practicable,” thus socio-economic considerations have to be balanced against expected ecological benefits at the earliest point in the development of measures. NMFS’ Final Rule for developing EFH plans states specifically that FMPs should “identify a range of potential new actions that could be taken to address adverse effects on EFH, include an analysis of the practicability of potential new actions, and adopt any new measures that are necessary and practicable” (50 CFR 600.815(a)(2)(ii)). In contrast to a process where the ecological benefits of EFH or HAPC measures are the singular initial focus and a later step is used to determine practicability, this approach would consider practicability simultaneously. Proposals should also be rated as to whether they identify affected fishing communities and the potential effects on those communities, employment, and earnings in the fishing and processing sectors and the related infrastructure, to the extent that such information is readily available to the public. Management and enforcement will also provide input during the review to evaluate general management cost and enforceability of individual proposals.

D. Management and Enforcement Review

Proposals are reviewed for management and enforceability.

E. Evaluation of Candidate HAPCs

The reviewers rank proposals by using the HAPC Criteria established by the Council in April 2010.

The Council has determined, through the HAPC identification process defined in the Council FMPs, that HAPCs in Alaska must be geographic sites that are rare, and must meet one of three other considerations: provide an important ecological function, be sensitive to human-induced degradation, or be stressed by development activities. In order to provide some guidance to proposers and reviewers about how proposals should be evaluated against these considerations, the following criteria have been adopted by the Council.

In order to be considered rare, proposals should meet the criteria identified in scores “2” or “3”. For the other three factors, a score of “0” indicates that a proposal does not meet the particular consideration in question.

Score	HAPC considerations			
	Rarity	Ecological Importance	Sensitivity	Level of Disturbance (applicable to activities other than fishing)
	<i>The rarity of the habitat type.</i>	<i>The importance of the ecological function provided by the habitat</i>	<i>The extent to which the habitat is sensitive to human induced environmental degradation</i>	<i>Whether and to what extent development activities are or will be stressing the habitat type</i>
0		Habitat does not provide any ecological associations ¹ for managed species.	Habitat resilient (not sensitive).	Habitat not subject to developmental stress.
1		Habitat provides little structure ² or refugia. Foraging and spawning areas do not exist.	Habitat somewhat sensitive and quickly recovers; 1- 5 years. Effects considered temporary.	Habitat is or will be exposed to minimal disturbance from development.
2	Habitat uncommon, less frequent, and occurs to some extent in one or two of the Alaska regions: Gulf of Alaska, Bering Sea, Aleutian Islands, and Arctic.	Habitat exhibits structure and provides refugia or substrates for spawning and foraging.	Habitat sensitive and recovery is within 10 years. Effects considered temporary, however may be more than minimal.	Habitat is or will be stressed by activities. Short term effects evident.
3	Habitat uncommon and occurs in discrete areas within only one Alaska region.	Complex habitat condition and substrate serve as refugia, concentrate prey, and/or are known to be important for spawning.	Habitat is highly sensitive and slow to recover; exceeds 10s of years. Effects will persist and more than minimal.	Habitat is or will be severely stressed or disturbed by development. Cumulative impacts require consideration from long term effects.

Data Certainty Factor

The Data Certainty Factor (DCF) determines the level of information known to describe and assess the HAPC site. The DCF is used to determine if information is adequate prior to taking further action. Thus, a HAPC proposal with a high criteria score and a low DCF is to be highlighted (flagged) as a potential candidate for HAPC and for further consideration as a research priority. The DCFs are color coded according to their weight to provide a visual way of informing the criteria scores, i.e., proposal scores with a DCF of 3 are color-coded green, scores with a DCF of 2 are color-coded yellow, and scores with a DCF of 1 are color-coded red

Weight	Data Certainty
3	Site-specific habitat information is available.
2	Habitat information can be inferred or proxy conditions allow for information to be reliable.
1	Habitat information does not exist; neither by inference nor proxy.

¹ Ecological associations are those associations where the habitat provides for reproductive traits (i.e., spawning and rearing aggregations) and foraging areas; thus, areas necessary for survival of the species. Associations include habitat complexity (features, structures, etc.) and habitat associations (provide refugia, spawning substrates, concentrate prey, etc.). Ecological importance is not to be applied across all waters or substrates.

² "Structure" refers to three-dimensional structure.

HAPC Proposal Rank

The HAPC ranking formula provides a color-coded score (sum of criteria scores) to provide information on the proposal as it is considered by the Council in the HAPC process. For example, a highly ranked HAPC proposal with a DCF of 3 (score color-coded green) has a high criteria score and information exists to assess the site.

HAPC Proposal Rank = Additive HAPC Criteria Score supplemented with Data Certainty Factor

Example evaluation of HAPC proposals:

HAPC Evaluation	Proposal A	Proposal B	Proposal C
Rarity	0	2	3
Ecological importance	2	1	3
Sensitivity	2	3	3
Stress / disturbance	0	0	2
Criteria Score Total (+)	4	6	11
Data Certainty Factor	3	3	1
HAPC Proposal Rank (=)	none*	6	11
Research Priority Flag			

* Proposals must meet the rarity consideration.

High scoring proposals with a low data certainty factor may warrant consideration as a research priority.

Council Action

A. Council Selection of HAPC Proposals Received

After the initial screening by Council staff, the Council identifies HAPCs for further review.

B. Council Assessment of Proposal Reviews

Staff provides the Council with a summary of the ecological, socioeconomic, and enforcement reviews.

C. Council Selection of HAPC Proposals for Analysis

The Council selects which proposal(s) go forward for analysis for possible HAPC designation. The Council may modify the proposed HAPC sites and management measures.

D. Potential Outcomes

Each proposal received and/or considered by the Council has one of three possible outcomes:

1. The proposal could be accepted, and, following review, the concept from the proposal could be analyzed in a NEPA document for HAPC designation.
2. The proposal could be used to identify an area or topic requiring more research, which the Council would request from NMFS or another appropriate agency.

3. The proposal could be rejected.

E. Stakeholder Input

The Council may set up a stakeholder process, as appropriate, to obtain additional input on proposals.

F. Technical Review

The Council may obtain additional technical reviews as needed from scientific, socioeconomic, and management experts.

G. NEPA Analysis

Staff prepares a National Environmental Policy Act (NEPA) analysis and other analyses necessary under applicable laws and Executive Orders.

H. Public Comment on NEPA Analysis

The Council receives a summary of public comments and take final action on HAPC selections and management alternatives.

I. Periodic Review

The Council may periodically review the efficacy of existing HAPCs and allow for input on new scientific research.

Summary

Habitat Areas of Particular Concern (HAPC) are important tools for fishery managers in consideration of affects to sensitive and rare habitat areas exposed to stress from fishing or developmental activities. NMPFC will work closely with NOAA Fisheries, stakeholders, and the Public to identify HAPCs and to prepare conservation measures, as needed.

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Habitat Areas of Particular in the Alaska Region

HAPCs are specific subsets of EFH. HAPCs highlight specific habitat areas with extremely important ecological functions and/or areas that are especially vulnerable to human-induced degradation.

HAPC's sites are as follows:

HAPC	Area Size (Approx.)	Fishery Management Application	Specific Regulation
Alaska Seamount Habitat Protection Areas	5,300 nm ²	No federally permitted vessel may fish with bottom contact gear ⁱ .	Federal Register 50 CFR Part 679 Volume 71, No.124 Wednesday, June 28,2006 http://alaskafisheries.noaa.gov/regs/679a2.pdf
Bowers Ridge Habitat Conservation Zone	5,300 nm ²	No federally permitted vessel may fish with mobile bottom contact gear ⁱⁱ .	Same as above
Gulf of Alaska Coral Habitat Protection Areas	2,100 nm ²	No federally permitted vessel may fish with bottom contact gear ⁱⁱⁱ .	Same as above



HAPC maps are located at: http://sharpfin.nmfs.noaa.gov/website/EFH_Mapper/map.aspx

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ⁱ Bottom contact gear means nonpelagic trawl, dredge, dinglebar, pot, or hook-and-line gear.

ⁱⁱ Mobile contact gear means nonpelagic trawl, dredge, or dinglebar gear.

ⁱⁱⁱ See footnote i.

Figure 2. HAPC Process Sequential Steps

