

RECORD OF DECISION

FINAL ENVIRONMENTAL IMPACT STATEMENT FOR  
ESSENTIAL FISH HABITAT IDENTIFICATION AND CONSERVATION IN ALASKA

National Marine Fisheries Service  
Alaska Region

This Record of Decision documents the decision by the National Marine Fisheries Service (NMFS) to select the preferred alternatives identified in the April 2005 *Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska* (EIS) and to proceed with associated fishery management plan (FMP) amendments and rulemaking. The purpose of this action is to determine whether and how to amend the North Pacific Fishery Management Council's FMPs pursuant to Section 303(a)(7) of the Magnuson-Stevens Fishery Conservation and Management Act, which requires NMFS and the Council to describe and identify Essential Fish Habitat (EFH) for the fishery, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH.

## **I. BACKGROUND**

The 1996 amendments to the Magnuson-Stevens Act included new provisions concerning the identification and conservation of EFH. The Council amended its five FMPs in 1998 to address the new EFH requirements, and NMFS approved those FMP amendments in January 1999. A legal challenge resulted in a September 2000 United States District Court decision that upheld NMFS' approval of the EFH amendments under the Magnuson-Stevens Act, but ruled that the Environmental Assessment prepared for the amendments violated the National Environmental Policy Act. The court ordered NMFS to complete a new and thorough environmental analysis. Accordingly, the EIS evaluates alternatives for three actions: (1) describing and identifying EFH for fisheries managed by the Council; (2) adopting an approach for the Council to identify Habitat Areas of Particular Concern (HAPCs) within EFH; and (3) minimizing to the extent practicable the adverse effects of Council-managed fishing on EFH.

NMFS and the Council used an extensive public process to develop the EIS, including public scoping meetings (66 FR 30396; June 6, 2001), public hearings on the draft EIS (69 FR 10428; March 5, 2004), and numerous public meetings of the Council and its EFH Committee. NMFS published a notice of intent to prepare the EIS on June 6, 2001 (66 FR 30396); announced preliminary alternative approaches for identifying EFH and HAPCs on January 10, 2002 (67 FR 1325); and released a Draft EIS for public comment on January 16, 2004 (69 FR 2593). NMFS also subjected key parts of the EIS to an outside peer review by the Center for Independent Experts and involved the public in that review (69 FR 34136; June 18, 2004). NMFS received approximately 33,304 public comments on the draft EIS. The final EIS includes revisions in response to public comments and the peer review, and reflects the preferred alternatives endorsed by the Council in February 2005. The Environmental Protection Agency published the notice of availability for the final EIS on May 6, 2005 (70 FR 24037).

## **II. ALTERNATIVES CONSIDERED**

The following text describes the alternatives analyzed in the EIS for each of the three actions. NMFS considered several other alternatives during the development of the EIS. A summary of those alternatives, and a brief rationale as to why they were not fully analyzed, is provided in Section 2.5 of the EIS.

## **Action 1: Describe and Identify EFH**

Alternative 1 (No EFH Descriptions): Under Alternative 1, EFH would not be described and identified for species managed by the Council. The existing EFH descriptions that were approved in 1999 would be rescinded.

Alternative 2 (Status Quo EFH Descriptions): Under Alternative 2, EFH descriptions would remain exactly as they were approved in the Council's EFH FMP Amendments in 1999. EFH would continue to be described as all habitats within a general distribution for a life stage of a species, for all information levels, and under all stock conditions. EFH would be a subset of the geographic range of each life stage, and it would encompass an area containing approximately 95 percent of the population.

Alternative 3 (Revised General Distribution – Preferred Alternative): Under Alternative 3, EFH descriptions would be revised using the same basic methodology as Alternative 2, but applying the modified regulatory guidance from the EFH final rule (67 FR 2343, January 17, 2002; codified at 50 CFR 600 Subpart J) and incorporating recent and additional scientific information and improved mapping. In some cases, the geographic extent of individual EFH descriptions would be narrower than under status quo Alternative 2.

Alternative 4 (Presumed Known Concentration): Under Alternative 4, EFH descriptions would be revised using a narrower interpretation of the best available scientific information for those species and life stages for which sufficient information exists to identify possible areas of higher habitat function. In many cases, the geographic extent of individual EFH descriptions would be reduced compared to Alternatives 2 and 3.

Alternative 5 (Ecoregion Strategy): Under Alternative 5, EFH would be described in eight ecoregions (freshwater, nearshore and estuarine, inner and middle shelf, outer shelf, upper slope, middle slope, lower slope, and basin) by characterizing the species that use each area and the habitat types present. The overall approach would be to identify distinct ecological areas, along with the species that rely upon those habitats.

Alternative 6 (EEZ Only): Under Alternative 6, EFH descriptions would be revised using the updated general distribution information from Alternative 3, but EFH would be limited to waters and substrate within the EEZ. No EFH would be described in freshwater areas, estuaries, or nearshore marine waters under the jurisdiction of the State of Alaska. In other words, Alternative 6 is the same as the EEZ portion of Alternative 3.

## **Action 2: Adopt an Approach for Identifying HAPCs**

Alternative 1 (No HAPC Identification): Under Alternative 1, HAPCs would not be identified for species managed by the Council. The existing HAPC identifications that were approved in 1999 would be rescinded.

Alternative 2 (Status Quo HAPC Identification): Under Alternative 2, the existing HAPCs would remain in effect with no changes. Those HAPCs include living substrates in deep water, living substrates in shallow water, and freshwater areas used by anadromous salmon.

Alternative 3 (Site Based Concept): Under Alternative 3, the existing HAPC identifications would be rescinded, and the Council would adopt an approach that would allow specific sites within EFH, selected to address a particular problem, to be identified as HAPCs in the future.

Alternative 4 (Type/Site Based Concept – Preferred Alternative): Under Alternative 4, the existing HAPC identifications would be rescinded, and the Council would adopt an approach that would allow specific sites selected within identified habitat types within EFH to be identified as HAPCs in the future.

Alternative 5 (Species Core Area): Under Alternative 5, the existing HAPC identifications would be rescinded, and the Council would adopt an approach that would allow areas within EFH to be identified as HAPCs in the future, based on productivity of the habitat for individual species.

### **Action 3: Minimize Adverse Effects of Fishing on EFH**

Alternative 1 (Status Quo / No Action): Under Alternative 1, no additional measures would be taken at this time to minimize the effects of fishing on EFH. No new actions were taken to minimize the effects of fishing as part of the original EFH FMP amendments in 1998, although the Council adopted a number of measures to protect habitat from potential negative effects of fishing, both before and since that date, and those measures would remain in effect.

Alternative 2 (Gulf Slope Bottom Trawl Closures): Alternative 2 would prohibit the use of bottom trawls for rockfish in designated areas of the GOA upper to intermediate slope (200 to 1,000 m), but would allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas.

Alternative 3 (Upper Slope Bottom Trawl Prohibition for GOA Slope Rockfish): Alternative 3 would prohibit the use of bottom trawls for targeting GOA slope rockfish species on the entire upper to intermediate slope area (200 to 1,000 m), but would allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for slope rockfish.

Alternative 4 (Bottom Trawl Closures in All Management Areas): Alternative 4 would prohibit the use of bottom trawls in designated areas of the eastern Bering Sea (EBS), Aleutian Islands (AI), and GOA, as well as requiring trawl gear modifications in the BS area.

Bering Sea: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawl gear in five areas to the west, north, and northwest of the Pribilof Islands. Each of the five areas would be divided into four blocks, and one block in each area would be closed for 10 years. After 10 years, the closed block would reopen, and a different block would close for 10 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

Aleutian Islands: Prohibit the use of bottom trawls for all groundfish fisheries in designated areas of the AI: Stalemate Bank, Bowers Ridge, Seguam Foraging Area, and Semisopchnoi Island.

Gulf of Alaska: Prohibit the use of bottom trawls for rockfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m). Vessels endorsed for trawl gear would be allowed to fish for rockfish with fixed gear or pelagic trawl gear in these areas.

Alternative 5A (Expanded Bottom Trawl Closures in All Management Areas): Alternative 5A would prohibit the use of bottom trawls in larger designated areas of the EBS, AI, and GOA and would require trawl gear modifications in the EBS area.

*Bering Sea*: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawls in five areas to the west, north, and northwest of the Pribilof Islands. Each of the five areas would be divided into three blocks, and one block in each area would be closed for 5 years. After 5 years, the closed block would reopen, and a different block would close for 5 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

*Aleutian Islands*: Prohibit the use of bottom trawls for all groundfish fisheries in designated areas of the AI: Stalemate Bank, Bowers Ridge, Seguam Foraging Area, Yunaska Island, and Semisopchnoi Island. These closure areas would extend to the northern and southern boundaries of the AI management unit.

*Gulf of Alaska*: Prohibit the use of bottom trawls for all groundfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m). Additionally, prohibit the use of bottom trawls for targeting GOA slope rockfish on the GOA upper to intermediate slope (200 to 1,000 m), but allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas.

Alternative 5B (Expanded Bottom Trawl Closures in All Management Areas with Sponge and Coral Area Closures in the AI): Alternative 5B would prohibit the use of bottom trawls in designated areas of the EBS, AI, and GOA and would require trawl gear modifications in the EBS area.

*Bering Sea*: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawls in five areas to the west, north, and northwest of the Pribilof Islands. Each of the five areas would be divided into three blocks, and one block in each area would be closed for 5 years. After 5 years, the closed block would reopen, and a different block would close for 5 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

*Aleutian Islands*: Allow bottom trawling to continue in AI areas that have supported the highest catches in the past, and prohibit bottom trawling in all other portions of the AI management region to prevent future impacts to undisturbed habitats in those areas, in accordance with one of the three options described below. Pelagic trawls could be used outside of the designated open areas, but only in the off-bottom mode. All of the options would include a requirement for 100 percent observer coverage and a vessel monitoring system for vessels fishing for groundfish. All of the options include the intent that a comprehensive plan for research and monitoring would be developed in the AI.

#### Option 1

1. Open areas would be designated based on areas of higher effort distribution from 1990 through 2001.
2. TAC reductions would be made for Pacific cod, Atka mackerel, and rockfish in proportion to the catch attributable to the closed areas.

3. Coral/bryozoan and sponge bycatch limits would be imposed to close specific fisheries and areas if a bycatch limit were reached.

#### Option 2

1. Open areas would be designated based on the methodology used in Option 1 above, with eight specific modifications based on data analysis and input from fishermen and Aleutian Islands residents, as recommended by Oceana. The specific modifications involve the following areas: Buldir Island, Murray Canyon, South Amchitka, Petrel Bank, Gusty Bay, Kanaga Island, Adak South, and Atka Pass.
2. TAC reductions would be made for Atka mackerel and rockfish in proportion to the catch attributable to the closed areas.
3. Coral/bryozoan and sponge bycatch limits would be imposed to close specific fisheries and areas if a bycatch limit were reached.
4. All bottom contact fishing would be prohibited in six coral garden sites located off Semisopchnoi Island, Bobrof Island, Cape Moffet, Great Sitkin Island, Ulak Island, and Adak Canyon.

#### Option 3

Open areas would be designated based on the methodology used in Option 1 above, with specific modifications based on data analysis and input from trawl fishermen, as recommended by the Groundfish Forum.

*Gulf of Alaska:* Prohibit the use of bottom trawls for all groundfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m). Additionally, prohibit the use of bottom trawls for targeting GOA slope rockfish on the GOA upper to intermediate slope (200 to 1,000 m), but allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas.

Alternative 5C (Expanded Closures in the Aleutian Islands and Gulf of Alaska – Preferred Alternative): Alternative 5C would amend the FMPs to prohibit the use of certain bottom contact fishing gear in designated areas of the AI and GOA to reduce the effects of fishing on corals, sponges, and hard bottom habitats. The management measures established by this alternative would be in addition to existing habitat protection measures (e.g., area closures, gear restrictions, and limitations on fishing effort).

*Aleutian Islands:* Open areas would be designated where bottom trawling would be allowed. The open areas would be based on areas of high fishing effort from 1990 through 2001, with specific modifications based on data analysis and input from AI trawl fishermen and with additional modifications to reduce the open areas to avoid coral habitat. The open areas would be the same as those in Alternative 5B, Option 3, minus two areas with coral habitat (one south of Attu Island and the other on Petrel Bank near Semisopchnoi Island). Bottom trawling would be prohibited in all remaining sections of the AI management area. Pelagic trawls could be used outside of the designated open areas, but only in the off-bottom mode. Additionally, all bottom contact fishing would be prohibited in six coral garden sites located off Semisopchnoi Island, Bobrof Island, Cape Moffet, Great Siskin Island, Ulak Island, and Adak Canyon. Fishery monitoring measures would include existing levels of observer coverage, plus a requirement for a vessel monitoring system on all fishing vessels in the AI.

Gulf of Alaska: Bottom trawl gear would be prohibited for all groundfish fisheries in ten designated areas of the GOA upper to intermediate slope (200 to 1,000 m). Fishery monitoring measures would include existing levels of observer coverage. NMFS would add to the Council's preferred alternative a requirement for a vessel monitoring system on all fishing vessels with bottom contact gear in the GOA to ensure adequate enforcement.

Alternative 6 (Closures to All Bottom-tending Gear in 20 percent of Fishable Waters): Alternative 6 would prohibit the use of all bottom-tending gear (dredges, bottom trawls, and pelagic trawls that contact the bottom, longlines, dinglebars, and pots) for commercial fisheries within approximately 20 percent of the fishable waters (i.e., 20 percent of the waters shallower than 1,000 m) in the GOA, AI, and BS.

### **III. ENVIRONMENTALLY PREFERRED ALTERNATIVES**

The Council on Environmental Quality regulations for implementing the National Environmental Policy Act require that the Record of Decision specify "the alternative or alternatives which were considered to be environmentally preferable" (40 CFR 1505.2(b)). The environmentally preferred alternative generally would cause the least damage to the physical and biological environment and is the alternative that would best protect, preserve, and enhance historic, cultural, and/or natural resources.

For Action 1, the environmentally preferred alternative for describing and identifying EFH is Alternative 3 (Revised General Distribution), which is also NMFS' and the Council's preferred alternative. Under Alternative 3, EFH descriptions would incorporate updated scientific information, and the resulting EFH areas would represent 95 percent of an accumulated population index for each managed species, as described by a GIS analysis. The approach would result in smaller EFH designations for adults and juveniles of many species as compared to the status quo, yet the resulting EFH descriptions would be sufficiently broad to account for changes in habitat usage over time. The smaller EFH designations for some species would reflect essential habitats more precisely, and may increase the potential for benefits to target species because conservation efforts could focus on those more discrete areas. Alternative 3 is the only alternative that incorporates all of the following elements: the most recent scientific information and analysis; a species-specific approach to identify EFH as discrete areas; and sufficiently risk-averse EFH descriptions to account for changes in habitat use over time.

For Action 2, the environmentally preferred alternative for adopting an approach to identify HAPCs is Alternative 3 (Site Based Concept), which is also NMFS' and the Council's preferred alternative. Under Alternative 3, NMFS would rescind the existing HAPCs, which are very broad types of habitat, and adopt a more focused site based approach that should provide a better tool for management purposes. Alternative 4 provides for site based HAPCs as well, but Alternative 3 would provide flexibility for the Council to identify types of habitat as priorities for future site based HAPC designations, or simply to pursue HAPC designations for sites that contain a variety of habitat types. Either way, the Council would be able to use HAPC designation to highlight specific portions of EFH for purposes of conservation and management.

For Action 3, the environmentally preferred alternative for minimizing the effects of fishing on EFH is Alternative 5B, Option 2 (Expanded Bottom Trawl Closures in All Management Areas with Sponge and Coral Area Closures in the AI). Alternative 5B, Option 2, would include larger fishery closures in the GOA and AI than Alternative 5C (NMFS' and the Council's preferred alternative), plus rotating bottom trawl closures in the EBS, but the costs would be significantly higher (\$13.0 million revenue at risk, as compared to \$2.4 million for Alternative 5C). Although the closed areas would be larger under Alternative 5B, Option 2, the preferred alternative incorporates measures that enhance protection for the most vulnerable habitats while minimizing costs for the fishing industry. Selection of the preferred

Alternative 5C is consistent with the Magnuson-Stevens Act requirement to minimize to the extent practicable the adverse effects of fishing on EFH. As discussed in more detail in section V below, the EIS analysis indicates that no new measures are necessary to minimize the adverse effects of fishing on EFH, yet the Council recommended adopting Alternative 5C to be precautionary.

#### **IV. PUBLIC COMMENTS ON THE FINAL EIS**

NMFS received 8 public comments on the Final EIS, which are discussed briefly in the following paragraphs. Many of the comments repeat issues that were raised in comments on the Draft EIS. Responses to all public comments on the Draft EIS are contained in Appendix L to the Final EIS, and are not repeated here.

The Alaska Longline Fishermen's Association raised concerns about proposed requirements for vessel monitoring systems (VMS) on GOA longline vessels. As discussed below, based on these comments and a recommendation from the Council, the proposed regulations to implement the preferred alternative will not require VMS for fixed gear vessels in the GOA.

Oceana and the Alaska Marine Conservation Council expressed support for the preferred alternatives, but voiced concern about the lack of new habitat conservation measures for the EBS. Both commenters asserted that without new measures for the Bering Sea, the fisheries remain out of compliance with the Magnuson-Stevens Act. As discussed below, the preferred alternatives do not include new management measures for the EBS because available information indicates that the EBS does not support the kind of hard bottom habitats that sustain extensive corals and other particularly sensitive benthic invertebrates. Also, the EIS analysis does not indicate that new actions to minimize the effects of fishing are required under the Magnuson-Stevens Act. Nevertheless, the Council plans to initiate a subsequent analysis specifically to consider potential new habitat conservation measures for the EBS as a precautionary step, as it did for the GOA and AI. Oceana also reiterated its comments on the Draft EIS, and the Alaska Marine Conservation Council reiterated its disagreement with the EIS conclusion that "no Council managed fishing activities have more than minimal and temporary adverse effects on EFH..." as noted in its comments on the Draft EIS.

The State of Alaska reiterated its comments on the Draft EIS regarding the selection of preferred alternatives. The State of Alaska also objected to Appendix G of the EIS, which discusses threats to EFH from non-fishing activities, and asserted that Appendix G "imposes an obligation on agencies to respond in writing to generic conservation measures that have not been based on sound science, have not been thoroughly vetted with upland regulatory agencies or the affected public, and act as de facto regulation." The conservation recommendations in Appendix G do not require a written response from action agencies. Section 305(b)(4)(B) of the Magnuson-Stevens Act requires federal (and not state) agencies to respond in writing to NMFS EFH conservation recommendations regarding specific proposed actions, and those recommendations may or may not draw upon the information included in Appendix G. The recommendations in Appendix G are based upon the best available scientific information, including dozens of peer-reviewed references, have been made available for public comment on several occasions, and have been modified in response to public comments. The recommendations are non-binding and do not act as de facto regulations.

The Alaska Forest Association and the Resource Development Council reiterated their comments on the Draft EIS regarding the selection of preferred alternatives and the propriety of identifying EFH in state waters. The Alaska Forest Association also stated that although Appendix G has been improved, it still does not accurately reflect the limited potential effects of forestry activities on EFH under applicable management practices. Appendix G notes clearly that modern forest practices, when fully implemented, avoid or minimize adverse effects to EFH. However, when those practices are not followed, forestry

activities can cause a variety of adverse effects to EFH. Also, some consequences of past timber harvesting continue to affect EFH. The Resource Development Council similarly criticized Appendix G and cited its comments on the Draft EIS.

The Marine Conservation Alliance supported the preferred alternatives and suggested that fishing gear modifications may be the most fruitful option for the pending analysis of new habitat conservation measures for the EBS. The commenter also questioned the EIS conclusion that all of the alternatives for minimizing the effects of fishing on EFH are practicable, except for Alternative 6. The commenter noted that Options 1 and 2 for Alternative 5B do not accurately reflect important fishing grounds in the areas that would remain open to bottom trawling, and thus should not be considered practicable. The practicability analysis in Section 4.5.3.3 of the EIS considered the effects of fishing on EFH and the costs and benefits of potential management measures, and concluded that all three options for Alternative 5B are practicable, despite the fact that they use different approaches to reflect important fishing areas. The preferred Alternative 5C addresses the problems with Alternative 5B highlighted by the commenter.

The Environmental Protection Agency reiterated its comments on the Draft EIS regarding the selection of preferred alternatives for identifying EFH and HAPCs and the importance of enforcement for fishery closures.

## **V. NMFS DECISION AND THE FACTORS CONSIDERED IN THE DECISION**

### **Action 1: Describe and Identify EFH**

NMFS will implement Alternative 3 (Revised General Distribution) to describe and identify EFH.

The alternatives for describing and identifying EFH use different methodologies and result in different areas being designated as EFH for managed species. Differences in the environmental consequences of the alternatives are directly related to the areas and habitats encompassed by the resulting EFH designations. Different size designations may increase or decrease the efficacy of EFH conservation measures and the effects on other components of the environment.

In considering the different alternatives, NMFS determined that three of the alternatives are not consistent with the Magnuson-Stevens Act or the EFH regulations. Alternatives 1 and 6 would not describe and identify any habitats (Alternative 1) or all habitats (Alternative 6) necessary to managed species for spawning, breeding, feeding, or growth to maturity, as required by Section 303(a)(7) of the Magnuson-Stevens Act and 50 CFR 600.815(a)(1). Alternative 2 does not reflect the best (most recent) scientific information available, as required by national standard 2 (Section 301(a)(2) of the Magnuson-Stevens Act) and 50 CFR 600.815(a)(1)(ii)(B). Alternatives 3 through 5 are consistent with the Magnuson-Stevens Act and the EFH regulations, and reflect different approaches that influence their overall efficacy and relative merits.

Alternative 3 would refine the existing EFH description and identification, but would not lead to substantial changes in environmental effects because the areas identified would not be substantially reduced in size. To the extent that EFH designations for some species would be reduced in geographic scope to reflect essential habitats more precisely, there may be a slightly increased potential for benefits to target species, because conservation efforts could focus on those more discrete areas to minimize habitat loss or degradation. Alternative 4 would result in smaller EFH designations for many species, and as with Alternative 3, may result in increased potential benefits for target species because smaller EFH designations that reflect the most important habitats would allow conservation efforts to be focused more effectively. Alternative 5 would change the EFH description and identification to use a broad ecoregion approach, which may be less beneficial for target species and federally managed fisheries because it



would be harder to distinguish EFH from all potential habitats. In other words, Alternative 5 would provide less information about EFH for particular species than Alternatives 3 and 4.

NMFS initially recommended that the Council endorse Alternative 4 (Presumed Known Concentration) to identify EFH more narrowly for many species, highlighting the habitat areas that commonly support higher concentrations of fish. Such areas presumably represent higher relative habitat value for managed species compared to other habitats. Describing and identifying these smaller areas as EFH for specific managed species would enable the Council, NMFS, other federal and state agencies, and fishing and non-fishing industries to focus on smaller areas for purposes of avoiding and minimizing adverse effects to the habitat. The Council chose not to endorse Alternative 4 because of concern that the resulting narrower EFH designations might not account for changes in habitat usage over time. Also, the Council recognized that the total aggregated area of EFH descriptions for all managed species would be identical under Alternatives 3 and 4 because data limitations for some species would lead to equally broad EFH designations under either of those alternatives.

For Action 1, the EIS discusses the effects of each alternative on habitat, target species, federally managed fisheries, other fisheries and fishery resources, protected species, ecosystems and biodiversity, and non-fishing activities. NMFS selected Alternative 3 as the preferred alternative based on those evaluation factors; the Council's recommendation; public comments; and three summary factors: relative size of EFH designations, consistency with the Magnuson-Stevens Act and the EFH regulations, and overall efficacy and relative merits. These considerations are summarized in Section 4.5.1 of the EIS. Alternative 3 would incorporate updated scientific information, and the resulting EFH areas would represent 95 percent of an accumulated population index for each managed species, as described by a GIS analysis. The approach would result in smaller EFH designations for adults and juveniles of many species as compared to the status quo.

## **Action 2: Adopt an Approach for Identifying HAPCs**

NMFS will implement Alternative 3 (Site Based Concept) to adopt an approach for identifying HAPCs.

The alternatives for HAPC identification are a range of different methodological approaches, rather than different specific types or areas of habitat. Therefore, the likely effects of HAPC designation cannot be evaluated with specificity in this EIS. Differences in the environmental consequences of the alternatives are therefore related to the type of approach that would be used to identify HAPCs in the future and the anticipated effects of HAPCs that would be designated under each approach.

Alternative 1 would rescind the existing HAPCs and provide for no new HAPCs, and thus would fail to take advantage of a tool available to the Council to highlight particularly valuable and/or vulnerable habitats within EFH. Alternative 2 would retain the status quo HAPCs, but the broad and general nature of the existing HAPC designations limits their efficacy as a tool for prioritizing discrete habitat areas. Alternative 3 would limit HAPCs to specific sites, rather than permitting HAPCs to be identified for general types of habitat wherever they may be found, and therefore could be more effective than Alternative 2 by virtue of being more focused. Alternative 4 could offer more potential benefits for target species because the stepwise process of selecting habitat types and then specific sites could yield a more rational and structured effort to ensure that HAPCs would focus on the habitats within EFH that are most valuable and/or vulnerable. Alternative 5 would limit the identification of HAPCs to specific sites supporting habitat functions for individual target species, and thus has the potential to benefit target species more directly than the other alternatives. However, the scarcity of scientific information about habitat requirements of individual species could limit the effectiveness of that approach. Alternatives 3 through 5 would have comparable potential effects, but those indirect effects would depend upon the specific HAPC designations implemented in future Council and NMFS actions.

NMFS initially recommended that the Council endorse Alternative 4 (Type/Site Based Concept) because identifying priority habitat types and then considering site-specific HAPCs would encourage a screening process to ensure proposals meet characteristics defined by the Council as being especially important. The Council chose not to support Alternative 4 because of concern that picking specific habitat types within which HAPCs could be identified might limit the Council's flexibility in the future. However, the Council identified two priority habitat types for its first call for HAPC proposals, and indicated a desire to identify priorities before future calls for proposals as well. The Council can thus achieve the benefits of Alternative 4 without being locked into a strict stepwise process.

For Action 2, the EIS discusses the effects of each alternative on habitat, target species, federally managed fisheries, other fisheries and fishery resources, protected species, ecosystems and biodiversity, and non-fishing activities. NMFS selected Alternative 3 as the preferred alternative based on those evaluation factors; the Council's recommendation; public comments; and three summary factors: relative size of HAPC designations, consistency with the EFH regulations, and overall efficacy and relative merits. These considerations are summarized in Section 4.5.2 of the EIS. Alternative 3 would rescind the existing HAPCs, which are very broad types of habitat, and adopt a more focused site-based approach that should provide a better tool for management purposes.

### **Action 3: Minimize Adverse Effects of Fishing on EFH**

NMFS will implement Alternative 5C (Expanded Closures in the Aleutian Islands and Gulf of Alaska) to minimize the effects of fishing on EFH.

The EIS uses the best information available to summarize the effects of fishing on EFH and the consequences of the alternatives. The EIS evaluates the effects of fishing on habitat by using a quantitative mathematical model developed by the NMFS Alaska Fisheries Science Center. The model estimates the proportional reductions in habitat features relative to an unfished state, assuming that fishing will continue at the current intensity and distribution until the alterations to habitat and the recovery of disturbed habitat reach equilibrium. The model provides a tool for bringing together all available information on the effects of fishing on habitat, such as fishing gear types and sizes used in Alaska fisheries, fishing intensity information from observer data, and gear impacts and recovery rates for different habitat types. Due to the uncertainty regarding some input parameters (e.g., recovery rates of different habitat types), the results of the model are displayed as point estimates, as well as a range of potential effects.

After considering the available tools and methodologies for assessing effects of fishing on habitat, NMFS, the Council, and the Council's Scientific and Statistical Committee concluded that the model incorporates the best available scientific information and provides a good approach to understanding the impacts of fishing activities on habitat. The model was also reviewed and supported by an independent panel of outside experts. Nevertheless, the model and its application in the EIS have many limitations. Both the developing state of this new model and the limited quality of available data to estimate input parameters prevent drawing a complete picture of the effects of fishing on EFH. The model incorporates a number of assumptions about habitat effect rates, habitat recovery rates, habitat distribution, and habitat use by managed species. The quantitative outputs of the analysis may convey an impression of rigor and precision, but the results actually are subject to considerable uncertainty.

Based on the best available scientific information, the EIS analysis concludes that despite persistent disturbance to certain habitats, the effects on EFH are minimal because the analysis finds no indication that continued fishing activities at the current rate and intensity would alter the capacity of EFH to support healthy populations of managed species over the long term. The EIS concludes that no Council-

managed fishing activities have more than minimal and temporary adverse effects on EFH for any FMP species, which is the regulatory standard requiring action to minimize adverse effects under the Magnuson-Stevens Act (50 CFR 600.815(a)(2)(ii)). Additionally, the analysis indicates that all fishing activities combined have minimal, but not necessarily temporary, effects on EFH. These findings suggest that no additional actions are required pursuant to the EFH regulations. However, as noted above, the analysis has many limitations, and the effects of fishing on EFH for some managed species are unknown. Even though the available information does not identify adverse effects of fishing that are more than minimal and temporary in nature, that finding does not necessarily mean that no such effects exist. Thus, the Council recommended appropriate precautionary measures.

The Council endorsed Alternative 5C for a number of reasons, all of which support NMFS' decision to implement this alternative. The Council recognized that the EIS analysis found no adverse effects of fishing on EFH that are more than minimal and not temporary in nature. Nevertheless, the Council acknowledged that considerable scientific uncertainty remains regarding the consequences of habitat alteration for the sustained productivity of managed species. The Council also noted recent information from a variety of sources about the existence, fragility, and potential ecological significance of cold water corals and other epifauna, particularly in the AI area, and the Council noted considerable public support for adopting precautionary measures to protect such habitats while maintaining important fisheries. The Council considered a wide range of management options for reducing the potential effects of fishing on EFH, and it selected an alternative that incorporates measures that enhance protection for the most vulnerable habitats while minimizing costs for the fishing industry.

Alternative 5C incorporates measures from other alternatives that focus on the areas that support (or are most likely to support) corals and other fragile sea floor habitats that may be especially slow to recover following disturbance. For the AI, Alternative 5C includes a variation of the open area approach from Alternative 5B, resulting in extensive closures to bottom trawling to protect relatively undisturbed habitats. Additionally, Alternative 5C prohibits all bottom contact fishing within six coral garden areas, providing a higher level of protection for those especially diverse and fragile habitats. For the GOA, Alternative 5C includes closures to bottom trawling in ten areas on the GOA slope to reduce the effects of fisheries with higher scores in the evaluation of the effects of fishing on EFH (Appendix B of the EIS). Alternative 5C does not include new management measures for the EBS because available information indicates that the EBS does not support the kind of hard bottom habitats that sustain extensive corals and other particularly sensitive benthic invertebrates. However, the Council plans to initiate a subsequent analysis specifically to consider potential new habitat conservation measures for the EBS, including the management options identified in the EIS and other options.

Alternative 5C also incorporates many existing measures that protect habitat, such as the Bristol Bay closure area, Pribilof Islands habitat conservation area, Southeast Alaska trawl closure, Sitka Pinnacle marine reserve, red king crab savings area, Kodiak king crab protection zones, and Steller sea lion measures. The Council also initiated a HAPC process to consider additional habitat protection (see Appendix J of the EIS). NMFS had not recommended any particular management alternative for this action, but had encouraged the Council to consider additional precautionary management measures to avoid disturbance to fragile sea floor habitats that are especially slow to recover (see Appendix E of the EIS). Alternative 5C is consistent with that recommendation.

To assist in determining the practicability of the alternatives for minimizing the effects of fishing on EFH, Section 4.5.3.3 of the EIS considers the long- and short-term costs and benefits of the potential management measures to EFH, associated fisheries, and the nation, pursuant to 50 CFR 600.815(a)(2)(iii). All of the alternatives except Alternative 6 would be practicable to implement, although they vary in their effects on fishermen, communities, and associated industries.

For Action 3, the EIS discusses the effects of each alternative on habitat, target species, the economic and socioeconomic aspects of federally managed fisheries, other fisheries and fishery resources, protected species, and ecosystems and biodiversity. NMFS selected Alternative 5C as the preferred alternative based on those evaluation factors; the results of the analysis of the effects of fishing on EFH (Appendix B of the EIS); the considerations described in the preceding paragraphs; and consistency with the Magnuson-Stevens Act and other applicable law. Alternative 5C incorporates all practicable means to avoid or minimize environmental harm, pursuant to 40 CFR 1505.2(c). The action includes no mitigation, so a monitoring and enforcement program is not required pursuant to 40 CFR 1505.2(c). Nevertheless, NMFS will work with the U.S. Coast Guard to monitor and enforce resulting fishery regulations, as described in Section 4.3.8 of the EIS.

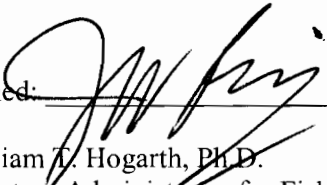
Section 2.3.3.7 of the EIS states that “NMFS would add to the Council’s preferred alternative a requirement for a vessel monitoring system on all fishing vessels with bottom contact gear in the GOA to ensure adequate enforcement.” Following publication of the final EIS, NMFS determined that the implementing regulations should require VMS in the GOA only for vessels with mobile bottom tending fishing gear, and fixed gear vessels (including pot, jig, and hook-and-line gear) should be exempt from the VMS requirement. NMFS’ decision is consistent with a unanimous June 2005 vote of the Council, which requested that NMFS not impose new VMS requirements for fixed gear vessels in the GOA. The Council also voted unanimously to request that NMFS develop a separate comprehensive analysis of alternatives for applying VMS for all fishing vessels in the BSAI and GOA to address enforcement, management, and safety objectives.

Several reasons led NMFS to modify the preferred alternative to include more limited VMS coverage in the GOA. First, the EIS notes that mobile bottom tending fishing gears including bottom trawls and dredges have the greatest potential adverse effects on sensitive sea floor habitat features such as those contained in the Gulf of Alaska Slope Habitat Conservation Areas (GOASHCA), Alaska Seamount Habitat Protection Areas (ASHPA), and Gulf of Alaska Coral Habitat Protection Areas (GOACHPA). Although bottom trawling is prohibited in the eastern GOA, including all of the GOACHPA, it is allowed in most of the ASHPA and the GOASHCA, so VMS would facilitate enforcement for bottom trawl vessels in those areas. Second, all of the proposed GOA closed areas were developed with extensive input from the fishing industry to avoid core fishing areas. The combination of limited fishing effort in these areas and industry participation in selecting the areas to be closed should reduce the likelihood that fixed gear fishermen will attempt to violate the closures. Third, NMFS received comments on the Final EIS from the Alaska Longline Fishermen's Association (representing approximately 65 members, most of whom fish from vessels less than 60 feet in length) strongly opposing a VMS requirement for fixed gear vessels due to the cost and the perceived lack of need for VMS to protect sensitive habitat features. The EIS analysis does not indicate to NMFS that the costs of VMS are prohibitive for fixed gear vessels, and VMS would facilitate better enforcement of closed areas. However, the VMS requirements included in this action would promote very effective enforcement for the gears with the greatest potential to impact sensitive habitat features. NMFS agrees with the Council that a separate comprehensive analysis of VMS requirements, to address all fisheries managed by the Council, would be an appropriate means to evaluate the costs and benefits of requiring broader use of VMS.

**VI. CONTACT PERSON**

Further information concerning this Record of Decision may be obtained by contacting Jon Kurland, NMFS Alaska Region, P.O. Box 21668, Juneau, Alaska, 99802-1668, (907) 586-7638.

Signed: \_\_\_\_\_



Date: 8.8.05

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