

AMENDMENT 5
to the Fishery Management Plan for the
Scallop Fishery Off Alaska

Instruction 1

In chapter 1.0, section 1.1 entitled “History of the FMP and Federal Involvement in the Scallop Fishery,” add the following paragraph:

Amendment 5: Description and Identification of Essential Fish Habitat.

On [insert date of approval of amendment], NMFS approved Amendment 5 to the FMP which implemented the Essential Fish Habitat (EFH) provisions contained in the Magnuson-Stevens Fishery Conservation and Management Act and 50 CFR 600.815. Amendment 5 describes and identifies EFH fish habitat for scallops and describes and identifies fishing and non-fishing threats to scallop EFH, research needs, habitat areas of particular concern, and EFH conservation and enhancement recommendations.

Instruction 2

The heading for section 1.2 is amended to read "Description of the Management Area".

Section 1.2.4 is removed; section 1.2.3 "Benthic community" is renumbered as section 1.2.4; the heading for section 1.2.2 is amended to read "Physical characteristics of the management area"; the last paragraph of section 1.2.2 is deleted, the next to the last paragraph of section 1.2.2 and Figure 1 are removed and added to a new section 1.2.3 entitled "Commercial fisheries for Alaskan scallops."

Instruction 3

The heading for section 1.3.1 is amended to read "General description" and the second paragraph is removed.

Instruction 4

Add a new section 1.3.5 entitled “Essential fish habitat for Alaska scallops”.

Add a new section 1.3.5.1 entitled "Habitat requirements by life history stage” and insert the following paragraphs:

Summaries and assessments of habitat information for scallops off the coast of Alaska are provided in the “Essential Fish Habitat Assessment Report for the Scallop Fisheries Off the Coast of Alaska” dated March 31, 1998. Habitat descriptions and life history

information was reviewed and the levels of information available for each life history stage was determined. The approach set forth in regulations at 50 CFR 600.815(a)(2) for gathering and organizing the data necessary to identify EFH was applied. In evaluating the level of knowledge available, a level 0 was defined as a subset of level 1. For scallops, it was determined that information at levels 0, 1, and 2 was available.

The information available for weathervane scallops and other scallop species is primarily broad geographic distributions based on specific samples from surveys and fisheries which have not been linked with habitat characteristics. The ability to precisely define the habitat (and its location) of each life stage in terms of its oceanographic (temperature, salinity, nutrient, current) trophic (presence of food, absence of predators), and physical (depth, substrate, latitude and longitude) characteristics is very limited. Consequently, the information included in the habitat descriptions and life stage is restricted primarily to broad biogeographic and bathymetric areas and occasional references to known bottom type associations.

Information about the entire range of a species is included in the textual descriptions of EFH; however, the maps only show EFH and known areas of high weathervane scallop concentrations in the State and Federal waters off Alaska. Identification of EFH for weathervane scallops included historical range information. Traditional knowledge and sampling data have indicated that distributions may contract and expand due to a variety of factors including, but not limited to, temperature change, current patterns, changes in population size, and changes in predator and prey distribution.

At the end of new section 1.3.5.1:

- insert the text and table located on pages 9 through 12 of the “Essential Fish Habitat Assessment Report for the Scallop Fisheries Off the Coast of Alaska” dated March 31, 1998;
- then insert Table 1 "Levels of Essential Fish Habitat information currently available for Alaska scallops, by life history stage" and Table 2 "Summary of Weathervane scallop habitat associations, biological attributes and reproductive traits" found on pages 9 and 179, respectively, of the "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 the Groundfish Fishery of the Bering Sea and Aleutian Islands Area; Amendment 8 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs; Amendment 5 to the Fishery Management Plan for the Scallop Fishery Off Alaska; Fishery Management Plan for the Salmon Fisheries in the EEZ Off the Coast of Alaska” dated [insert date EA is signed by Assistant Administrator for Fisheries] [**hereinafter “EFH EA”**];
- Then finally insert the information on the habitat feature abbreviations found on page 7 of the “Essential Fish Habitat Assessment Report for the Scallop Fisheries Off the Coast of Alaska” dated March 31, 1998.

Instruction 5

Add a new section 1.3.5.2 entitled "EFH Determination" and insert the following EFH definitions from section 6.4 of the EFH EA:

- EFH Definition for Alaskan Weathervane scallops
- EFH Definition for Alaskan Pink scallops
- EFH Definition for Alaskan Spiny scallops
- EFH Definition for Alaskan Rock scallops

Instruction 6

Add a new section 1.3.5.3 entitled "EFH maps" and insert the following maps from section 6.4 of the EFH EA:

- BSAI Weathervane scallops (late juveniles and adults)
- GOA Weathervane scallops (late juveniles and adults)

Instruction 7

Add a new section 1.3.6 entitled "Fishing activities that may adversely affect EFH".

Add a new section 1.3.6.1 entitled "The indirect effects of fishing: An executive summary" and insert the text and tables from section 9.2.1.1 of the EFH EA.

Add a new section 1.3.6.2 entitled "The effects of fishing gear on benthic communities" and insert the text and tables from section 9.2.1.2 of the EFH EA.

Add a new section 1.3.6.3 entitled "Literature of Scientific Studies on Fishing Threats to Habitat" and insert the text from section 9.2.3 of the EFH EA.

Instruction 8

Add a new section 1.3.7 entitled "Non-fishing related activities that may adversely affect EFH".

Add a new section 1.3.7.1 entitled "Identification of non-fishing adverse impacts to EFH in Alaska" and insert the text and table from section 9.1.2 of the EFH EA.

Add a new section 1.3.7.2 entitled "References" and insert text from section 9.1.4 of the EFH EA.

Instruction 9

Add a new section 1.3.8 entitled "Cumulative Effects on EFH from Fishing and Non-Fishing Activities" and insert the following paragraphs:

The NPFMC and the Secretary of Commerce have taken appropriate actions when threats to fish habitat have been identified. This includes cumulative effects from fishing activities and non-fishing activities. Cumulative effects on EFH from fishing activities are examined in the Stock Assessment and Fishery Evaluation (SAFE) reports, which are produced annually for the crab, scallop, and groundfish fisheries. In addition, an Ecosystem Considerations section to the SAFE reports is prepared which identifies specific ecosystem concerns that are considered by fishery managers in maintaining sustainable marine ecosystems.

Cumulative effects from non-fishing activities relate to the amount of habitat loss from human interaction and alteration or natural disturbances. Non-fishing activities are widespread and can have localized impacts to scallop habitats such as accretion of sediments from at-sea disposal areas, oil and gas exploration, sea floor mining, ice scouring and significant storm events. Also, water quality is a significant factor for healthy larval and juvenile life stages of mollusks. In addition to EFH consultation guidelines mandated by the MSA, NMFS reviews these types of effects during the review process required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for certain activities that are regulated by Federal, state, tribal or local authority. The jurisdiction of these activities is in "waters of the United States" and includes both riverine and marine habitats. To assist in understanding these widespread impacts, the development of a habitat and effect baseline database would accelerate the review process and outline areas of increased disturbance. Inter-agency coordination would prove beneficial to all.

Instruction 10

Add a new section 1.3.9 entitled "Habitat Conservation and Enhancement Recommendations for Non-fishing Threats to EFH" and insert the text and tables from section 9.1.3 of the EFH EA.

Instruction 11

Add a new section 1.3.10 entitled "Habitat Conservation and Enhancement Recommendations for Fishing Threats to EFH" and insert the following paragraph:

Area closures to trawling and dredging in the Bering Sea and Aleutian Islands area serve to protect EFH from potential adverse impacts caused by these gear types. Other management measures, such as the Pribilof Islands Habitat Conservation Area, the Bristol Bay Closure Area and the proposed Cape Edgecumbe pinnacle closure, are designed to reduce the impact of fishing on marine ecosystems. Catch quotas, bycatch limits and gear restrictions control removals of prey species. Studies that compare seafloor habitats in areas heavily trawled with areas that have had little trawl effort and research efforts on Alaskan scallops as discussed in section 1.3.13 may reveal future habitat conservation and enhancement measures necessary to protect EFH. Additionally, the annual review of existing and new EFH information during the SAFE development

process is expected to identify adverse effects to EFH from fishing and proposals to amend the FMP to minimize those adverse effects. Proposals can be submitted during the Council's plan amendment cycle.

Instruction 12

Add a new section 1.3.11 entitled "Prey species as a component of EFH" and insert the following paragraphs:

Loss of prey is an adverse effect on EFH because one component of EFH is that it be necessary for feeding. Therefore, actions that reduce the availability of a major prey species, either through direct harm or capture, or through adverse impacts to prey species' habitat that are known to cause a reduction in the population of the prey species, may be considered adverse effects on a managed species and its EFH. Adverse effects on prey species and their habitats may result from fishing and non-fishing activities.

Scallops are non-burrowing filter feeders, subsisting primarily on phytoplankton.

Instruction 13

Add a new section 1.3.12 entitled "Habitat Areas of Particular Concern" and insert the text from section 11.4 of the EFH EA.

Add a new section 1.3.12.1 entitled "Living substrates in shallow waters" and insert the text from section 11.4.1 of the EFH EA.

Add a new section 1.3.12.2 entitled "Living substrates in deep waters" and insert the text from section 11.4.2 of the EFH EA.

Add a new section 1.3.12.3 entitled "Freshwater areas used by anadromous fish" and insert the text from section 11.4.3 of the EFH EA.

Instruction 14

Add a new section 1.3.13 entitled "Essential Fish Habitat Research and Information Needs" and insert the following paragraph:

Alaska leads the Nation in fish habitat area and in the value of fish harvested, yet the most basic information on distribution and habitat utilization for most early life stages of commercially valuable groundfish and shellfish is lacking. Systematic sampling exists only for targeted adults. A program is required to generate distributional data on which to determine EFH for the juvenile and larval stages of most of our marine fish. Additionally, Alaska fisheries are affected by anthropogenic impacts, including anthropogenic development that impacts watersheds, wetlands, estuaries, and nearshore

benthic environment. Mapping and assessing impacted wetlands and eelgrass beds in an established GIS database with all salmonid producing streams (including riparian and upland land cover and use determinations) and escapements in the system is required to make necessary resource management decisions. Priority needs to be given to identifying, assessing and mapping habitat types such as offshore larval concentration areas (i.e. gyres), nursery areas (i.e. rocky outcroppings and/or fine sediments), and productive bottom types for juveniles and adults. Functional value of high-priority habitats need to be established, and the linkages between fishery productivity and habitats need to be understood. Fishing impact studies are in their infancy in Alaska. Increased emphasis needs to be placed of fish ecology, and marine benthic habitat typing in conjunction with impact assessments of trawls, dredges, longlines, pot gear, and other fishing gear used in Alaska fisheries. Development of a standardized marine benthic habitat typing technology is a required precursor.

At the end of new section 1.3.13, insert the text from section 10.4 of the EFH EA.

Instruction 15

Add a new section 1.3.14 entitled “Review and Revision of EFH Components of FMPs” and insert the following paragraphs:

To incorporate the regulatory guidelines requirement for review and revision of EFH FMP components, the NPFMC will conduct a complete review of all the EFH components of each FMP once every 5 years and will amend those EFH components to include new information.

In between each five-year comprehensive review, the NPFMC will utilize its annual FMP amendment cycle to solicit proposals on HAPCs and/or conservation and enhancement measures to minimize the potential adverse effects from fishing. Those proposals that the NPFMC endorses should be developed independent of the five-year comprehensive EFH review cycle.

An annual review of existing and new EFH information will be conducted and this information will be provided for review during the annual SAFE report process. This information could be included in the “Ecosystems Considerations” chapter of the SAFE report.

Instruction 16

Amend the heading of section 3.2.4 to read “Habitat Objective: To protect, conserve, and enhance adequate quantities of EFH to support a fish population and maintain a healthy ecosystem” and amend the first paragraph as follows:

Habitat is defined as the physical, chemical, geological, and biological surroundings the

support healthy, self-sustaining populations of living marine resources. Habitat includes both the physical component of the environment which attracts living marine resources (e.g. salt marshes, sea grass beds, coral reefs, intertidal lagoons, and near shore characteristics) and the chemical (e.g. salinity, benthic community) and biological characteristics (e.g. marine and salmonid life stage histories, oceanography) that are necessary to support living marine resources. The quality and availability of habitat supporting the scallop populations are important. Fishery managers should strive to ensure that those waters and substrate necessary to scallops for spawning, breeding, feeding, or growth to maturity are available. It is also important to consider the potential impact of scallop fisheries on other fish and shellfish populations. The essential fish habitat of Alaskan scallops, and the potential effects of changes in that EFH on the fishery, are described in sections 1.3.5 through 1.3.14 of this FMP.