

Essential Fish Habitat

R

ESSENTIAL FISH HABITAT: PAST AND PRESENT

ivers, estuaries, and the open ocean provide important habitat for fish, allowing them to feed, grow, and reproduce. Congress recognized the importance of habitat to fish in 1996, making significant revisions to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). These revisions emphasized the need to protect fish habitat from the growing threats of human activity. Specifically, the MSA required that fishery management councils (Councils) identify as essential fish habitat (EFH) those areas necessary for fish to perform their basic life functions. By 1998, the Councils had identified EFH for each federally managed fish species during each of their life stages.

The MSA states that Councils must minimize to the extent practicable adverse effects to EFH caused by fishing activities. The National Marine Fisheries Service (NMFS) and the Councils are responsible for ensuring that impacts from fishing do not reduce the ability of habitat to support healthy fisheries. The MSA also requires federal agencies to consult with NMFS when their actions may adversely impact EFH. Together, these requirements form the foundation of fish habitat conservation under the EFH program, which seeks to ensure habitat protection for nearly 1,000 managed fish species while providing efficient, flexible, and transparent review procedures.



EFH is defined as "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." "Waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish. "Substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities. "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "Spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.

“. . . THOSE WATERS AND SUBSTRATE NECESSARY TO FISH FOR SPAWNING, BREEDING, FEEDING, OR GROWTH TO MATURITY.”





DESCRIBING & IDENTIFYING ESSENTIAL FISH HABITAT

The eight regional fishery management councils and the NMFS Highly Migratory Species Division are responsible for drafting fishery management plans and describing and identifying EFH for each life stage of each managed species. EFH descriptions are based on the best available science, are developed through a public process, and are available on the EFH website (see footer).

Activities within EFH Designations

Identifying an area as EFH does not make it a marine protected area or indicate what kind of activities will be allowed or excluded from that area. The intent of the EFH provisions is to highlight the importance of habitat for fisheries. EFH management measures are handled separately from the process of describing and identifying EFH.

Essential Fish Habitat in State Waters

EFH occurs in state waters because certain life stages of many federally managed species use these waters. The requirement for the Councils and NMFS to minimize adverse impacts from fishing applies only to fishing activities occurring in federal waters that are regulated under a federal fishery management plan. However, NMFS and the Councils may provide states with recommendations for minimizing adverse impacts to EFH from fishing that takes place in state waters. Also, NMFS must provide conservation recommendations for non-fishing activities of other federal agencies in state waters that would adversely affect EFH.

HABITAT AREAS OF PARTICULAR CONCERN

HAPCs are a subset of EFH that deserve special attention because they provide extremely important ecological functions and/or are especially vulnerable to degradation. For instance, HAPC designation may be warranted for areas that play a vital role in the reproductive cycle of a managed species (e.g., grouper spawning sites) or areas that contain a rare habitat type (e.g., corals) that may be sensitive to disturbance from fishing or other human activities. Councils may designate an area as a HAPC for one or more of the following reasons:

- The habitat provides important ecological functions
- The habitat is sensitive to human-induced environmental degradation
- Development activities are, or will be, stressing the habitat
- The habitat type is rare.

The Purpose of HAPCs

The purpose of HAPCs is to focus conservation, management, and research efforts on subsets of EFH that are vulnerable to degradation or are especially important ecologically for federally managed fish. The HAPC designation alone does not confer additional protection or restrictions to an area, but helps to focus EFH conservation, management, and research priorities. HAPC designation is a valuable way to acknowledge areas where we have detailed information on ecological function and habitat vulnerability, indicating a greater need for conservation and management. In some instances the Councils and NMFS may develop fishery management measures to conserve the habitat within the HAPC.

Designating HAPCs

The NMFS Highly Migratory Species Division and each Council have designated HAPCs for some of their managed species. Councils have designated HAPCs as discrete geographic areas or as all areas of a specific habitat type (e.g., seagrass). Aided by the research of NMFS and others, the Councils are continually improving their understanding of the life histories of fish species and their specific habitat requirements. As this understanding develops further, the Councils and NMFS may designate additional HAPCs or refine the existing designations.

HAPCs vs. EFH

HAPCs comprise only a small fraction of the areas identified as EFH. Healthy populations of fish require the total area described and identified as EFH. HAPCs identify specific areas for resource managers and users that may warrant more targeted protection measures. As NMFS strives to promote healthy and productive coastal and marine ecosystems, the conservation of both relatively small and larger habitat areas will be necessary.

FISHING IMPACTS ON ESSENTIAL FISH HABITAT

NMFS' concern for impacts to EFH includes non-fishing activities as well as the fishing activities it regulates. Examples of adverse effects from fishing practices can include altered physical terrain from bottom-tending gear, chemical modifications to the sediment and overlying water column, and biological changes to the benthic community by the removal of prey species.

Managing Fishing Impacts

The MSA requires that all fishery management plans minimize to the extent practicable adverse effects of fishing on EFH. All fishery management plans have measures in place, such as area closures, gear restrictions, and harvest limits that control fishing activities and provide benefits to EFH.

For example, in Alaska, NMFS and the North Pacific Fishery Management Council approved several management measures in 2006 to conserve fish habitat, including the designation of the Aleutian Islands Habitat Conservation Area. The decision provides unprecedented conservation of fish habitat, such as sensitive deep water corals, by prohibiting bottom trawling in an area larger than the states of Texas and Colorado combined. The measures were developed with extensive input from the fishing industry and environmental groups and have been praised by all sides as a reasonable compromise.

Also, on the West Coast in 2006, NMFS and the Pacific Fishery Management Council approved a plan to establish and conserve as EFH more than 130,000 square miles of marine waters. This precautionary measure prohibits fishing methods, such as bottom trawling, that can cause long-term damage to the ocean floor. The plan, developed with support and advice from both environmental and fishing industry groups, conserves habitat in areas essential to the health of commercial and recreational fisheries.

Some examples of other measures include:

- Limiting access of bottom trawling to certain areas important to cod and scallops in New England
- Restricting gear use in an area called Oculina Bank in the South Atlantic to protect sensitive coral habitats
- Restricting the use of certain bottom gears in the Gulf of Mexico and the Caribbean to protect coral habitats.

NMFS continues to work with the Councils to develop additional measures to conserve EFH as data from ongoing research on fishing gear impacts and habitats become available. NMFS' dedication to continually improving habitat protection and conservation is one part of an ongoing effort to move towards ecosystem-based approaches to sustainable fisheries management.



Photo credit: John Naughton

FEDERAL ACTIONS AND ESSENTIAL FISH HABITAT

Once EFH has been described and identified, Congress mandated in the MSA that federal agencies consult with NMFS on activities that may adversely affect fish habitat. Through the EFH consultation process, NMFS provides recommendations to federal agencies to avoid, minimize, mitigate, or otherwise offset the effects of their actions on EFH. The consultation process requires that: (1) federal agencies provide NMFS with a description of impacts of an action through an *EFH Assessment* if they determine their actions may adversely affect EFH; (2) NMFS provides EFH conservation recommendations for any federal action that would adversely affect EFH; and (3) federal action agencies respond to NMFS' recommendations in writing. If the action agency disagrees with NMFS' advice, it must explain why. The procedures for EFH consultations are outlined in the EFH Consultation Guidance located on the EFH website and in the EFH regulations.

What Are Adverse Effects?

An adverse effect is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within or outside of EFH and may include site-specific or habitat-wide impacts.

Consultation Approaches

NMFS offers five different approaches to complete EFH consultations. Each approach varies according to the type of action, its effect on EFH, and the level of information required from the action agency. NMFS also encourages federal agencies to work closely with NMFS early, before formally initiating an EFH consultation. Often, early coordination can streamline the EFH consultation process and lead to mutually beneficial outcomes for both EFH and the federal action agency (see box opposite page).

• Use of Existing Procedures

EFH consultations are often *combined* with existing environmental review procedures, such as those used under the National Environmental Policy Act and the Endangered Species Act, to streamline EFH consultation requirements and avoid duplication with other environmental reviews.

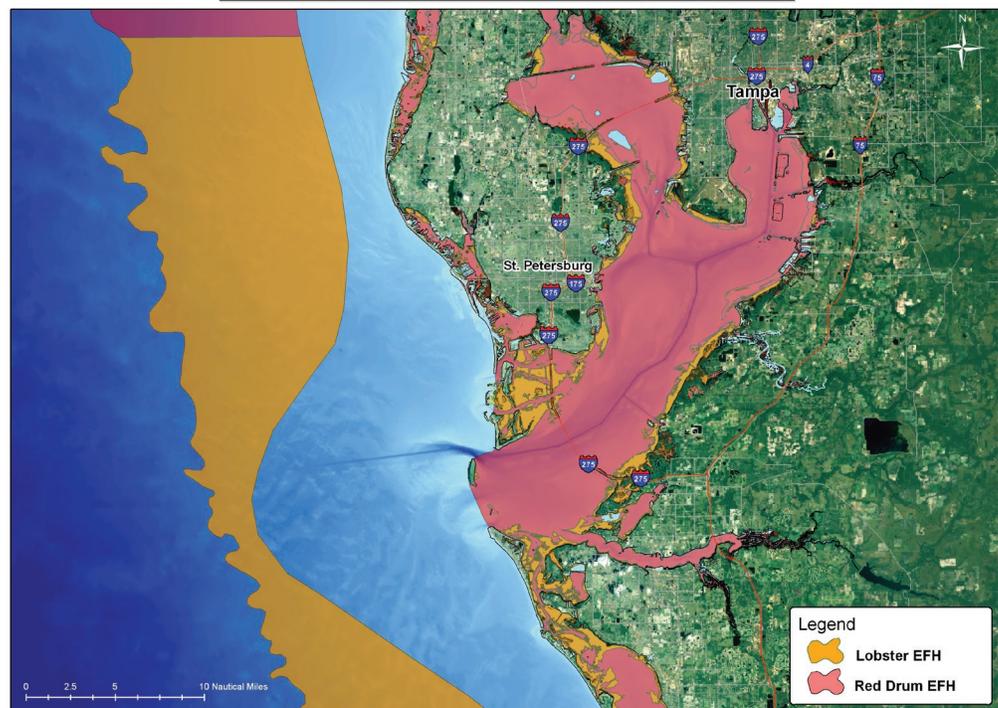
• Programmatic Consultations

Federal agencies and NMFS may consult on a group of *similar actions* that fall within a program--programmatic consultations. In many cases, when the federal action agency accepts programmatic EFH conservation recommendations, no further consultation is required.

• General Concurrences

A general concurrence identifies specific types of federal actions that may adversely affect EFH, but for which no further consultation will be required because NMFS determines that the *actions do not cause greater-than-minimal adverse effects* on EFH, either individually or cumulatively.

Essential Fish Habitat Surrounding Tampa Bay



Produced by NOAA's National Marine Fisheries Service Office of Habitat Conservation Sept. 15th, (2006) for reference purposes only. This map depicts a sample representation of Gulf of Mexico Fishery Management Council Essential Fish Habitat.



● **Abbreviated Consultations**

An abbreviated consultation is performed for those projects that may have an adverse effect on EFH, but for which the effects will not be substantial. An abbreviated consultation is only completed if no general concurrence, programmatic consultation, or existing environmental review process is available or appropriate for the federal action.

● **Expanded Consultations**

An expanded consultation is completed when no general concurrence, programmatic consultation, or existing environmental review process is available or appropriate for the federal action, and the action may result in substantial adverse effects on EFH. Procedures for expanded consultations allow for detailed analysis of effects by providing NMFS more time to coordinate with the action agency and develop EFH conservation recommendations.

The consultation options listed above accommodate a variety of situations and minimize duplication, resulting in an effective, streamlined process. Close cooperation between NMFS and federal action agencies will provide a regulatory environment in which agencies can carry out activities while simultaneously considering the health of fish habitat.

Non-Federal Actions

● **State Agencies:** NMFS is required by the MSA to issue EFH conservation recommendations to state agencies if their actions would adversely affect EFH. However, state agencies are not required to consult with NMFS or respond to any EFH conservation recommendations NMFS may provide.

● **Private Landowners:** Private landowners have NO responsibilities to consult with NMFS directly. Consultation is required ONLY if the

project is funded, permitted, or authorized by a federal agency and the project may adversely affect EFH. In that case, the appropriate federal action agency undertakes the consultation with NMFS on behalf of the landowner.

Interagency Cooperation Leads to Habitat Protection in Puerto Rico

In 2001, the U.S. Environmental Protection Agency (EPA) and NMFS worked together to effectively protect hundreds of acres of submerged hard bottom, sand, and algal plain habitats in Puerto Rico from adverse effects of operating five wastewater treatment facilities. By initiating coordination early with NMFS, the EPA facilitated a smooth and successful implementation of their EFH consultation requirements. The effective and early coordination eventually led to agreement on all EFH conservation recommendations offered by NMFS and timely project completion.

After receiving a permit proposal for five wastewater treatment facilities requesting exemption from required secondary treatment of wastewater under Section 301(h) of the Clean Water Act, the EPA contacted NMFS. The EPA opted to seek guidance from and work with NMFS before preparing an EFH Assessment on the project, identifying key fish habitat issues, potential impacts of the proposed permits, and mitigation strategies to avoid, minimize, or mitigate these impacts. As a result, the EPA's EFH Assessment completely addressed the major issues and ensured the efficient approval of the proposed permits. Species with essential fish habitat in the project area included queen triggerfish, yellowtail snapper, banded butterflyfish, queen conch, and corals.

The initial discussions ensured there were no surprises on either side of the EFH process. In its response to the EPA's assessment, NMFS accepted the Clean Water Act waivers and agreed with the EPA that all wastewater treatment facilities follow strict monitoring requirements, effluent limitations, and other special conditions. EPA, in turn, accepted all of NMFS' additional recommendations for the permit.

The use of interagency coordination, especially early in planning stages, is a valuable asset to the EFH process. Cooperative efforts of EPA and NMFS led to agreement from all parties in this situation, both protecting fragile marine resources and fulfilling the permit applicant's requests.



For more information on the Essential Fish Habitat Program and Regional contacts, please contact the Office of Habitat Conservation at 301-713-4300 or visit the Essential Fish Habitat homepage at:

<http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/index.htm>



June 2007