

## Regional EFH Profile: Gulf of Mexico

*This document was prepared by the Fisheries Leadership & Sustainability Forum with input from council and NOAA Fisheries staff as briefing material for the National Essential Fish Habitat Summit, May 17-19, 2016.*

### Summary

The Gulf of Mexico Fishery Management Council (Council) is currently undertaking a third Essential Fish Habitat (EFH) 5-year review process. The region's second review in 2010 did not result in any changes to EFH descriptions. EFH is described for each species and life stage based on areas of high species density and a functional relationships analysis using level 1 and 2 information.

### EFH timeline

1998	EFH described for various life history stages of 26 representative managed species and common coral complexes (Generic Amendment for Addressing EFH Requirements)
2004	Environmental Impact Statement (EIS) for the Generic Amendment for Addressing EFH Requirements
2005	Generic Amendment Number 3 for Addressing EFH Requirements, HAPC, and Adverse Effects of Fishing describes EFH for seven Fishery Management Plans (FMPs), including 55 species and two classes of coral
2010	EFH 5-year review of the Final Generic Amendment Number 3
2015	EFH 5-year review initiated, completion expected by December 2016

### EFH identification and review

#### *Generic Amendment*

EFH was first described in the 1998 Generic Amendment for each life history stage of 26 representative species that commonly occur in the marine and estuarine waters of the Gulf of Mexico from seven fishery management plans (FMPs), including shrimp, red drum, reef fish, stone crab, coral, spiny lobster, and coastal migratory pelagic resources. EFH was described using level 1 and 2 data based on species distribution maps and habitat association tables, produced by Council, NOAA Fisheries, and National Ocean Service staff. Since the managed species for this amendment occur in all estuarine and marine habitats, the Council developed two broad definitions of EFH:

*Estuarine EFH: "...all estuarine waters and substrates (mud, sand, shell, rock and associated biological communities), including the sub-tidal vegetation (seagrasses and algae) and adjacent inter-tidal vegetation (marshes and mangroves)." (GMFMC 1998).*

Marine EFH: “...all marine waters and substrates (mud, sand, shell, rock, hardbottom, and associated biological communities) from the shoreline to the seaward limit of the EEZ.” (GMFMC 1998).

The Council identified almost all estuarine and marine waters of the Gulf of Mexico Exclusive Economic Zone (EEZ) as EFH. No regulations resulted from this amendment.

#### *EIS and Generic Amendment 3*

In response to litigation, the Council performed a detailed analysis to develop an EIS (2004) in support of the 1998 Generic Amendment. This effort also constituted the first 5-year EFH review conducted by the Council. The Council hired a contractor to complete the EIS and established two panels, a User Review Panel and a Technical Review Panel, to review the methods and draft the EIS. The User Review Panel was composed of representatives from the fishing industry, oil and gas industry, and wetlands property owners. The Technical Review Panel included staff from the Council and state and federal agencies. The Council’s Habitat Protection Committee (HPC), Science and Statistical Committee (SSC) and the Habitat Protection Advisory Panel (HPAP) participated in the review process.

The EIS led to Generic Amendment 3 in 2005, which refined EFH designations to focus on the habitat of greatest importance to managed species by removing EFH designations from most Gulf of Mexico waters between 100 fathoms and the outer boundary of the EEZ. EFH was identified and described for 55 species and two coral classes for areas with higher species densities and based on levels 1 and 2 information from the 1998 Generic Amendment and functional relationships analysis. The functional relationships analysis “...determined habitat suitability for each species life stage based on substrate type and depth and relative abundance within 5 Gulf of Mexico eco-regions.” (GMFMC 2010).

Suitable habitat for each species and life stage was mapped with in a geographic information system (GIS). The Council used these maps to deliberate and create general EFH text descriptions. Generic Amendment 3 minimizes adverse impacts to EFH through gear restrictions and modifications, and through an educational program to help commercial and recreational fishermen to minimize impacts to coral reefs from fishing gear.

#### *Recent 5-year EFH review*

The Council conducted their second 5-year EFH review in 2010. This review included a literature survey for new information about EFH, managed species distribution, and fishing impacts on habitat, and an exploration of alternative methods to refine EFH, including model-based approaches to identify and describe EFH. The overall recommendation from this 5-year review was that a comprehensive or generic EFH amendment was not needed at the time and EFH should be updated as actions are developed for specific FMPs.

#### **EFH consultations**

EFH consultations are conducted by NOAA Fisheries Southeast Regional Fisheries Office staff. The Council occasionally comments on projects that could impact EFH.

#### **Looking ahead**

Council staff are currently working on a more comprehensive third 5-year EFH update and review. They are developing web resources to help facilitate more user-friendly exploration of EFH information.