

**SOUTHEAST REGION HABITAT CONSERVATION DIVISION  
GULF OF MEXICO FISHERY MANAGEMENT COUNCIL  
STATEMENT OF WORK AND DELIVERABLES  
ESSENTIAL FISH HABITAT 5-YEAR REVIEW SUPPORT**

One of the key provisions of the Magnuson-Stevens Fishery Conservation and Management Act for facilitating the long-term protection of essential fish habitats (EFH) for fishery resources calls for the review and updating of EFH identifications based on new scientific data and other relevant information. The objectives and goals for reviewing EFH, and the roles of the Fishery Management Councils (Councils) and NOAA's National Marine Fisheries Service (NMFS), are defined in the EFH implementing regulation (50 CFR 600.815(a)(10)). The implementing regulations state the "Councils and NMFS should periodically review the EFH provisions of Fishery Management Plans and revise or amend EFH provisions as warranted based on available information. . . . A complete review of all EFH information should be conducted as recommended by the Secretary, but at least once every 5 years." This scope of work will support the Gulf of Mexico's 5-year review of EFH and is anticipated to result in numerous updates and recommendations that should be put forth in the appropriate Council document and referenced in ongoing Council actions.

**Work to be Performed**

In support of a comprehensive 5-year review, the results of this work will improve knowledge of species habitat associations, life history information, and ultimately EFH designations. Specifically, this project will (1) improve habitat association tables, by species and life stage for federally managed fish and invertebrate species; (2) refine the current spatial depictions of EFH; and (3) allow development of a web-based database and mapping application to improve access and ease of use of EFH information at various life stages for better informed stock assessments and fishery management. Ultimately, this web-based tool would be easily accessible to the public and utilized as the framework for identifying and describing EFH.

**Task 1. Update and Improve Habitat Association Tables**

This funding will support a short-term (i.e., up to 17 months) technical staff position at the Gulf of Mexico Fishery Management Council. The incumbent will review and synthesize scientific literature based on the EFH designation criteria and update and add pertinent information to existing life-history habitat association tables. The incumbent will have a working knowledge of the marine environment and/or biological science that will aid them in synthesizing data from original manuscripts into the contemporary data structures relevant for the identification and mapping of EFH. An extensive literature search will be conducted for species managed under the eight Gulf FMPs. This review will encompass aspects related to age, feeding, growth, habitat, maturity schedules, and distribution by life stage when available. This will ensure that fishery managers are equipped with the best scientific information available and will encompass recent advances and in research. This aspect is critically important based on events such as the 2010 Deepwater Horizon Oil Spill that likely affected many federally managed species and their requisite habitat. The Deep Horizon Oil Spill event has also led to new scientific research that should be incorporated into our identification and description of EFH. As part of this process, the literature will be archived into a searchable EFH bibliography (e.g. Reference Manager database). The intent is to make the literature electronically available (subject to copyright agreements) or provide links to the publisher where the literature can be accessed. Where necessary, hard copy documents will be scanned and uploaded in PDF format.

### **Task 2. Review and Revision of EFH Maps by Fishery Management Plan**

This task would include a thorough review of the existing mapped representations of EFH for each FMP. The current mapped representations may warrant improvements or refinements based on new information. For example, the shrimp FMP does not include an area of the west Florida shelf that is known to support shrimping activity and thus is likely EFH for shrimp. Similarly, the shoreward boundary may not be well defined for some FMPs and may be inconsistently defined throughout the Gulf. We will work with the respective Gulf States to determine consistent, practicable boundaries that are biologically based yet reasonable for management use. This would aid determination of when EFH consultation is necessary, provide a means to determine or predict effects from environmental impacts, and better quantify abundance and productivity of fish and invertebrate stocks.

### **Task 3. Web-based Application**

We anticipate this task will largely be conducted by current Gulf Council staff. The primary goal is to make the most current EFH descriptions by species, life stage, and geographic footprint available via the internet (i.e., from Tasks 1 and 2). In practical terms, Task 3 will merge the products of Task 1 and Task 2 into an easy-to-use web application. From a data perspective, the objective is to create a web-enabled, searchable, and interactive database. The Gulf Council data portal (<http://portal.gulfcouncil.org>) will be used to host and serve the content. Specifically, data will be housed in a spatially referenced relational database such that information can be searched and displayed in interactive web-maps and tables. The search criteria would include, but not be limited to species, life stage, habitat type, depth, or geographical area and could be queried via a web-browser. References supporting the result (i.e., bibliography) would also be available. To implement this application, we plan to harness modern software and technology for this process using our existing Amazon Web Services cloud based server that is expandable (i.e., allows more content), scalable (i.e., computing power automatically increases with user demand), and cost effective. In addition, this approach is intuitive to the user and builds on applications we are currently developing. This system provides a substantial technical foundation for future initiatives and makes this valuable information available to a broad audience.

#### **Deliverables:**

- Updated and revised habitat association tables by species and life stage
- Improved EFH identification by species and life stage (to the extent practicable) for federally managed species in the Gulf of Mexico.
- Annotated bibliography supporting EFH descriptions
- Spatially referenced maps of EFH by species and life stage based on best scientific information available
- Interactive web application to search, and display EFH information for federally managed species in the Gulf of Mexico.

#### **Budget Narrative**

Total EFH position salary and benefits for 17 month period ending December 31, 2016 will be \$129,891. The Council will provide \$29,891 in additional funds that will be derived from its end-of-year 2015 performance budget. Policy allows up to 2% of an employee's salary as an additional performance incentive.

Total Position Costs			
	2015 (5 mos)	2016 (12 mos)	Total Mos. 17
Annual Salary	53,302	54,102	
Monthly # of Mos	4,442 5	4,509 12	
	22,209	54,102	76,311
Health ES 2015	1,210	5	6,050
Health ES 2016	1,428	12	17,136
H SA 2015			5,000
H SA 2016			5,000
			33,186
Life	50 53	5 12	250 636
			886
Dental	78 82	5 12	390 984
			1,374
Retirement - 14%			10,684
FICA - 7.65%			5,838
Supplies			1,612
			129,891

Position Costs Charged to Council			
	2015	2016 (4 mos)	Total Mos. 4
Annual Salary	53,302	54,102	
Monthly # of Mos	4,442 0	4,509 4	
	0	18,034	18,034
Health ES 2015	1,210	0	0
Health ES 2016	1,428	4	5,712
H SA 2015			1,700
H SA 2016			1,700
			7,412
Life	50 53	0 4	0 212
			212
Dental	78 82	0 4	0 328
			328
Retirement - 14%			2,525
FICA - 7.65%			1,380
Supplies			0
			29,891

Position Costs Charged to EFH			
	2015 (5 mos)	2016 (8 mos)	Total Mos. 13
Annual Salary	53,302	54,102	
Monthly # of Mos	4,442 5	4,509 8	
	22,209	36,068	58,277
Health ES 2015	1,210	5	6,050
Health ES 2016	1,428	8	11,424
H SA 2015			5,000
H SA 2016			3,300
			25,774
Life	50 53	5 8	250 424
			674
Dental	78 82	5 8	390 656
			1,046
Retirement - 14%			8,159
FICA - 7.65%			4,458
Supplies			1,612
			100,000

# **GULF OF MEXICO FISHERY MANAGEMENT COUNCIL**

**2203 North Lois Avenue, Suite 1100**

**Tampa, Florida 33607**

## **POSITION DESCRIPTION**

**Title of Position: EFH Specialist**

**Name of Employee:**

This position will support the Gulf of Mexico's 5-year review of Essential Fish Habitat (EFH). The incumbent will integrate habitat and fisheries science to improve understanding of the role of EFH in fisheries management in the Gulf of Mexico. The incumbent will compile, analyze, and synthesize information suitable for presentation and display in a usable and understandable format to local, state, federal, and university scientists, the Gulf Council, and the public. The incumbent is directly supervised by the Fishery Biologist-Statistician. He or she also prepares materials and accomplishes these tasks per the direction of the Executive and Deputy Directors in collaboration with other technical staff.

### **Primary Responsibilities**

1. Responsible for conducting comprehensive literature searches and synthesizing relevant literature for federally managed fish and invertebrate species that will be used for updating and improving habitat association tables.
2. Responsible for reviewing current spatial depictions of EFH and revising as necessary in collaboration with Council and National Marine Fisheries Service staff.
3. Work with Council staff to develop a web-based database and mapping application (based on primary responsibilities 1 and 2 above) to improve access and ease of use of EFH information at various life stages for better informed stock assessments and fishery management.
4. Provides assistance to Council staff on EFH Fishery Management Plans, amendments and Committees, and other related work being conducted by the Council. Attends SSC and AP meetings and presents materials to the public and the Council as needed.
5. Contributes to a productive, harmonious, and cooperative work environment and is not disruptive, insubordinate, or behavioral in a manner that adversely affects the operations of the office or other activities that the incumbent attends.

### **General Duties**

Assists and advises the Executive and Deputy Directors and other technical staff on materials relating to EFH; prepares technical documents and EFH materials; and gathers materials for placement on the Council's web page and databases as appropriate. Keeps abreast of habitat and fishery science literature relevant to the incumbent's work responsibilities.

### **Skills and Qualifications**

The individual will have a Bachelor's (BA or BS) degree with 2 years of technical writing experience or a Master's degree (MA or MS) from an accredited university with a course of study and emphasis on Fishery Science, Fishery Management, Fisheries Ecology, or Marine Ecology. The individual must have strong organizational, technical writing, and communication skills in order to best interact with the staff, general public, and Council members.

**Supervisory Responsibility**

None.

**Supervision Received**

Is under the direct supervision of the Fishery Biologist/Statistician.

**Salary**

Salary is commensurate with the prevailing federal pay scale for General Schedule employees as appearing in current salary tables for equivalent Grade 10.

**Professional Contacts**

Professional contacts are with Council staff members, officials of federal and state agencies, Council members, universities, scientists, contractors, and the public.

**Physical Demands**

The work is sedentary. Travel is expected as the incumbent will be required to attend selected Council and other Council-related meetings.

**Work Environment**

The work is generally performed in an office setting. The work area is adequately lighted, heated, ventilated and air conditioned.

This is a complete and accurate description of the duties and responsibilities of my position.

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Date

This is a complete and accurate description of the duties and responsibilities of this position.

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John Froeschke/Fishery Biologist-Statistician

\_\_\_\_\_

Date