

Bonnie A. New, MD MPH
2216 Shakespeare
Houston, Texas 77030-1113
Tel: 713-668-6737

September 25, 2003

Dr. Roy Crabtree
Regional Administrator
National Oceanic Atmospheric Administration
9721 Executive Center Drive, North
St. Petersburg, FL 33702

Re: EFH EIS lacks a full range of reasonable alternatives

Dear Dr. Crabtree:

I am writing to address deficiencies in the Gulf of Mexico EFH EIS, and to urge you to review the EIS and see that it is amended to address the full range of reasonable choices for reducing harm to Gulf fish habitat. Gulf of Mexico fish habitats support 40% of the US commercial fishing yield in the lower 48 states, and play a huge role in our recreational fishing industry.

NEPA requires that all reasonable alternatives for achieving the goal of an action that a federal agency undertakes must be identified and evaluated. The draft EIS on essential fish habitat (EFH EIS) fails to include several reasonable alternatives for minimizing the impacts of fishing on habitat that is essential to the health of our fish stocks.

Alternatives that are included in the EIS:

1. changing the kind of chains shrimpers use on their shrimp trawls to have less impact on the marine bottom
2. a ban on certain fishing activities over coral reefs

Alternatives that are not considered in the EIS:

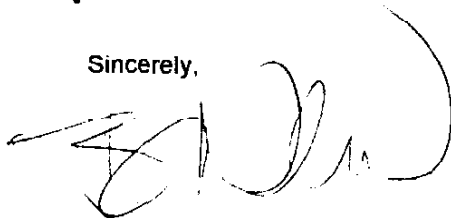
1. how to reduce the amount of shrimp fishing activity to which these bottom habitats are being exposed
2. establishing marine protected areas

BN1

The use of marine protected areas and the reduction of excess fishing efforts are not only reasonable options that should be considered, but have proven both economical and effective in other areas with similar problems.

I urge you to revise the EFH EIS to include all reasonable alternatives and bring this document into compliance with our federal environmental laws.

Sincerely,



03 SEP 31 PM 1:59
11-00000



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
Silver Spring, Maryland 20910

03 OCT 17 PM 1:05

PA	DRA	NEPA
Public Affairs	SRA	SDRA
Copy 1	F/SER2	F/SERX1
Copy 2	F/SER3	F/SERX2
Copy 3	F/SER4	F/SERX3
Budget	Comp Ops	
Return to	FYI	Date 10/22/03

DATE:

October 8, 2003

MEMORANDUM FOR:

Dr. Roy E. Crabtree
Regional Administrator
National Marine Fisheries Service
9721 Executive Center Drive North
St. Petersburg, FL 33702

FROM:

John King
Chief, Coastal Programs Division
NOAA Office of Ocean and Coastal Resource Management

SUBJECT:

Comments on Draft Environmental Impact Statement for Gulf of Mexico Fishery Management Council, Generic Essential Fish Habitat Amendment 7-03 (DEIS).

The Office of Ocean and Coastal Resource Management, Coastal Programs Division, has the following comments on the DEIS:

The DEIS, page 3-222 to 3-223, provides a good description of the federal consistency provisions of the Coastal Zone Management Act. However, this section does not indicate whether a consistency determination has been submitted to the coastal management programs of affected states.

NOAA regulations require that a Consistency Determination include a detailed description of the proposed activity, its expected effects on the coastal zone and an evaluation of the activity in light of the applicable enforceable policies of the state coastal management program. The requirements for a consistency determination are set forth in NOAA regulations at 15 CFR Part 930, subpart C.

The Environmental Impact Statement does not contain all information required by 15 CFR 930.39; specifically it lacks an evaluation of the applicable enforceable policies of affected state coastal management programs. If the requirements are not met, a state may consider such a consistency determination as incomplete and, thus, not start the consistency review period. Therefore, to avoid delays, the Council should include all information required for consistency determinations. See also 15 CFR 930.36 (e) for National and Regional Consistency Determinations. The NOAA Office of Ocean and Coastal Resource Management is available to provide any assistance you may need.

cc: Joyce Wood, NEPA Coordinator, Office of Strategic Planning,
N/SP,SSMC3 Rm 15743





DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553-1229

REPLY TO
ATTENTION OF

October 15, 2003

Regulatory Branch

Dr. Roy E. Crabtree
Regional Administrator
National Marine Fisheries Service
9721 Executive Center Drive North
St. Petersburg, FL 33702

Dear Dr. Crabtree:

As requested, we have completed a review of the Draft Environmental Impact Statement (DEIS) for the Generic Essential Fish Habitat (EFH) Amendment to various fishery management plans of the Gulf of Mexico. The Corps has jurisdiction over structures and fill placed in many of these same EFH areas under the Clean Water Act and the Rivers and Harbors Act.

COE1 Changes to the existing EFH procedures alluded to in the DEIS have the potential to increase the Corps' workload. Under the existing Memorandum of Agreement (MOA) between our agencies, the Corps has to respond that we have received EFH comments, and that we plan to address those comments in our permit decision. Ten days prior to signing an Environmental Assessment/Statement of Findings (EA/SOF) the Corps must inform NMFS of the comment resolution, or our intent override NMFS' EFH concerns. The bulkhead and fill activities mentioned in the DEIS will still be proposed by the general public, and many of these activities are authorized under our Nationwide Permit procedures without coordination with NMFS. The proposed modifications to the EFH procedures may further impact our processing time while we attempt to resolve outstanding EFH comments on specific cases. We would like clarification on how the proposed changes will result in less EFH impact without an undue burden on our process.

We appreciate the opportunity to review the DEIS. If you have any questions or need additional information concerning our comments, please contact Mr. John Machol, at the letterhead address or by phone at (409) 766-3944.

Sincerely,


Dolan Dunn
Chief, Regulatory Branch

Copy Furnished See Page 2

OCT 24 2003

Copy Furnished:
Office of Strategic Planning
N/SP, SSMC3 Room 15743
1315 East-West Highway
Silver Springs MD 20910



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

RA	DRA	NEPA	DK	11/5/03
Public Affairs	SRA	SDRA		
Copy	F/SER2	F/SERX1		
Orig	F/SER3	F/SERX2		
Route	F/SER4	F/SERX3		
	Budget	Comp Ops		
	FYI	Date	11/0/03	

October 28, 2003

Dr. Roy E. Crabtree
National Marine Fisheries Service
9721 Executive Center Drive North
St. Petersburg, Florida 33702

RE: National Oceanic and Atmospheric Administration Draft Environmental Impact Statement for the Generic Essential Fish Habitat Amendment 7-03 to Fishery Management Plans of the Gulf of Mexico: Shrimp, Red Drum, Reef Fish, Stone Crab, Coral and Coral Reef, Spiny Lobster in the Gulf and South Atlantic, and Coastal Migratory Pelagic Resources of the Gulf and South Atlantic - Of Interest to the State of Florida. For a Complete List of Figures on the CD, See File: "Section 9 Figures 703.PDF"

SAI # FL200308273717C

Dear Dr. Crabtree:

The Florida State Clearinghouse, pursuant to Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced Draft Environmental Impact Statement.

FLDEP1 Based on the information contained in the report and comments provided by our reviewing agencies, the state has determined that the subject project is consistent with the Florida Coastal Management Program.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Lindy McDowell at (850) 245-2167.

Sincerely,

Sally B. Mann, Director
Office of Intergovernmental Programs

SRM/lm

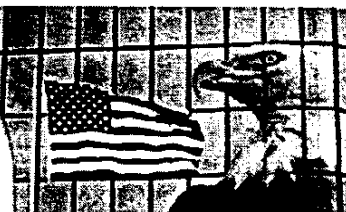
Enclosures



Florida

Department of Environmental Protection

"More Protection, Less Process"



Categories

[DEP Home](#) | [Contact DEP](#) | [Search](#) | [DEP Site Map](#)

Project Information	
Project:	FL200308273717C
Comments Due:	September 24, 2003
Letter Due:	October 24, 2003
Description:	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION - DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE GENERIC ESSENTIAL FISH HABITAT AMENDMENT 7-03 TO FISHERY MANAGEMENT PLANS OF THE GULF OF MEXICO: SHRIMP, RED DRUM, REEF FISH, STONE CRAB, CORAL AND CORAL REEF, SPINY LOBSTER IN THE GULF AND SOUTH ATLANTIC, AND COASTAL MIGRATORY PELAGIC RESOURCES OF THE GULF AND SOUTH ATLANTIC - OF INTEREST TO THE STATE OF FLORIDA. FOR A COMPLETE LIST OF FIGURES ON THE CD, SEE FILE: "SECTION 9 FIGURES703.PDF"
Keywords:	NOAA - DRAFT EIS FOR GENERIC ESSENTIAL FISH HABITAT IN GULF OF MEXICO
CFDA #:	11.441
Agency Comments:	
ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT	
No Final Comments Received	
FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION	
No Final Comments Received	
STATE - FLORIDA DEPARTMENT OF STATE	
No Comment	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
Comments: Florida Keys Aquatic Preserve; It is our recommendation that we must afford the most protection possible for Essential Fish Habitat. We have no objections with this project and it does not conflict with any statutory authorities. There are no permits or authorizations required from our program.	

For more information please contact the Clearinghouse Office at:

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

Visit the [Clearinghouse Home Page](#) to query other projects.

[Copyright and Disclaimer](#)
[Privacy Statement](#)



Department of Environmental Protection

Jeb Bush
Governor

Florida Keys National Marine Sanctuary
216 Ann Street
Key West, Florida 33040
(305) 292-0311; Fax (305) 292-5065

David B. Struhs
Secretary

To: Rosalyn Kilcollins, Mail Station 47, Douglas Building
From: Alicia Stevenson, Florida Keys Aquatic Preserve Manager
Date: September 23, 2003
Project: National Marine Fisheries Service- Draft EIS for Generic Essential Fish Habitat Amendment to Fishery Management Plans
SAI#: FL200308273717C

Dear Rosalyn,

The following comments pertain to the National Marine Fisheries Service- Draft EIS for Generic Essential Fish Habitat Amendment to Fishery Management Plans:

The Aquatic Preserves of the Florida Keys and the Florida Keys National Marine Sanctuary contain to some extent what has been designated as Essential Fish Habitat (EFH) for all seven fisheries to which the amendments in this document pertain. It has been realized that commercial and recreational fisheries are not an exhaustible resource and that our Nation's fisheries are in jeopardy.

To protect our fisheries we need not only to regulate the amount we take, we must also protect the fish habitat that is essential to their life cycle. The amendments proposed in this Draft Environmental Impact Statement will help to minimize the adverse effects of fishing on EFH. It is important to develop a range of alternatives to identify and describe EFH for these fisheries, identify actions to encourage the conservation of EFH and identify and implement measures that will minimize adverse effects of fishing on EFH.

It is our recommendation that we must afford the most protection possible for EFH. We have no objections with this project and it does not conflict with any statutory authorities. There are no permits or authorizations required from our program.

Thank you for the opportunity to review this project. The comments provided herein are not the final position of the Department and may be subject to revision pursuant to additional information and further review. If there are any comments, questions, or concerns regarding this permit review, please contact Alicia Stevenson at 305/292-0311 or email alicia.stevenson@noaa.gov.

Sincerely,

Alicia Stevenson

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

COUNTY: ALL

SAI-NOAA-DEIS
2003-7947

DATE: 8/25/2003

COMMENTS DUE DATE: 9/24/2003

CLEARANCE DUE DATE: 10/24/2003

SAI#: FL200308273717C

MESSAGE:

REFERENCE SAI # FL199806150272C

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
ENVIRONMENTAL PROTECTION		ENVIRONMENTAL POLICY UNIT	
FISH and WILDLIFE COMMISSION			
X STATE			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION - DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE GENERIC ESSENTIAL FISH HABITAT AMENDMENT 7-03 TO FISHERY MANAGEMENT PLANS OF THE GULF OF MEXICO: SHRIMP, RED DRUM, REEF FISH, STONE CRAB, CORAL AND CORAL REEF, SPINY LOBSTER IN THE GULF AND SOUTH ATLANTIC, AND COASTAL MIGRATORY PELAGIC RESOURCES OF THE GULF AND SOUTH ATLANTIC - OF INTEREST TO THE STATE OF FLORIDA. FOR A COMPLETE LIST OF FIGURES ON THE CD, SEE FILE: "SECTION 9 FIGURES703.PDF"

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- | | |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached | <input type="checkbox"/> Consistent/Comments Attached |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Inconsistent/Comments Attached |
| | <input type="checkbox"/> Not Applicable |

From:

Division of Historical Resources

Division/Bureau: Bureau of Historic Preservation

Reviewer: S. Edwards JAL

Date: 9-22-03 9/22/03

NHPA

RECEIVED
BUREAU OF
HISTORIC PRESERVATION
03 SEP -3 PM 3:08

RECEIVED

SEP 30 2003

OIP/OLGA



RECEIVED

NOV 17 2003

Coastal Environments, Incorporated

Services:Applied Science
& PlanningEnvironmental
Restoration &
MonitoringCultural Resources
ManagementGeographic
Information
Systems

Litigation Support

November 7, 2003

Dr. Roy E. Crabtree
Regional Administrator
NOAA Fisheries
9721 Executive Center Drive North
St. Petersburg, Florida 33702

<u>RA</u>	<u>DRA</u>	<u>NEPA</u>
Public Affairs	SRA	SDRA
Copy	FISER2	FISERX1
Orig	FISER3	FISERX2
Route	FISER4	FISERX3
Action	Budget	Comp Ops
Return to		Date 11/14/03

RE: *Comments Regarding the Draft Environmental Impact Statement (DEIS) for the Generic Essential Fish Habitat Amendment to the following Fishery Management Plans of the Gulf of Mexico (GOM)*

Dear Dr. Crabtree:

This letter is being submitted on behalf of St. Charles Land Syndicate, landowners of approximately 12,500 acres of the LaBranche Wetlands in St. Charles Parish, LA. Coastal Environments, Inc. respectfully submits the following comments regarding the aforementioned DEIS:

Essential Fish Habitat (EFH), as it applies to the protection and perpetuation of fishery species at the national level, should be a high priority; however, the number one priority in coastal Louisiana should be the stabilization, protection, and enhancement of all existing wetlands, whether saline or fresh. Freshwater wetland systems should be protected from marine tidal invasion and consequent deterioration. Preservation of freshwater wetland systems in Louisiana may require management measures that restrict or preclude immediate marine fisheries access to habitat classified as EFH. The forces of nature that contribute to unmitigated land loss in fresh to intermediate systems include tidal exchange, high salinities, wave erosion, and subsidence. Fresh to intermediate wetland habitats, that once provided a multitude of different functions, have been lost as the result of salinity levels that exceeded tolerable thresholds of onsite, plant survivability. The rapidity of change has often led to the collapse of the fresher systems rather than conversion or succession to higher salinity tolerant plant species. Thousands of acres of open water areas and standing dead bald cypress trees throughout southeast Louisiana are testimony to this statement.

Moreover, the effects of saltwater intrusion into fresh wetland areas have been well documented in the state's coastal restoration efforts (See attached excerpt from Coast 2050: Toward a Sustainable Coastal Louisiana). As wetland loss continues, connectivity between tidally influenced waterbodies and

Website:

vw.coastalenv.com

Corporate Office:

1260 Main Street
Baton Rouge, LA 70802
Ph (225) 383-7455
F (225) 383-7925
cei@coastalenv.com

Other Locations:

302 Saint John Street
Madisonville, LA 70447
Ph/F (985) 845-2879
mgagliano@coastalenv.com

1900 F Beach Boulevard
Gulfport, MS 39501
Ph (228) 822-9914
F (228) 822-9915
gcarbo@coastalenv.com

301 Texan Trail, Suite 2
Corpus Christi, TX 78411
Ph (361) 854-4885
F (361) 854-4815
rricklis@coastalenv.com

freshwater wetlands increases. The resulting marine tidal invasion, accentuates the objectives of EFH policies, but at the cost of deterioration and/or loss of freshwater systems. The priority of preserving and enhancing one habitat (saline) at the expense of others (low salinity tolerant fresh to intermediate) in Louisiana should be unacceptable to everyone. A diversity of such habitats and the sustainability of each are equally important. Moreover, the Clean Water Act and other federal and state laws simply do not recognize wholesale prioritization of one aquatic habitat over another.

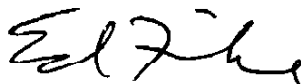
The St. Charles Land Syndicate property is located between the St. Charles/Jefferson Parish line and the east guide levee of the Bonnet Carre Floodway, south of Lake Pontchartrain. Open waterbodies and dead and stressed cypress trees are easily discernable from I-10, which traverses the width of the property. Approximately 5,051 acres of fresh and intermediate wetlands have been converted to open water between 1956 and 1998 at a rate of 120 ac/yr. Environmental documents prepared by the U. S. Army Corps of Engineers and the National Marine Fisheries Service indicate wetland loss and degradation on this tract are directly attributable to saltwater intrusion and the exportation of organic sediments through manmade canals.

CEI1 With background information presented, we respectfully take issue with one statement made repeatedly in the DEIS. *Designation of EFH has no direct impact on the physical, biological, or administrative environments, but it is likely to result in controversy in the human environment.* This statement is factually incorrect when applied to the preceding portion of this letter. The EFH designation creates an additional regulatory burden on landowners who want to protect their lands. Landowners should be able to implement measures (e.g., construction of levees, spoil banks, and/or water control structures) that protect wetland systems from destructive marine processes. Regulatory permit decisions, based in part on EFH mandated policies, may increase the short-term productivity of EFH designated species, but in the long-term, productivity will eventually decrease as the total wetland base decreases.

We believe the DEIS should be amended to: 1) revise or exclude the statement made repeatedly throughout the DEIS and 2) more importantly, charge NOAA and/or the Gulf Council with the task of revising EFH policy in coastal Louisiana to recognize the importance (of functions) of ALL wetland habitats and prioritize the preservation and protection of same without prejudice to EFH designated species.

Thank you for the opportunity to provide these comments.

Sincerely,



Ed Fike
Agent
St. Charles Land Syndicate

xc: St. Charles Land Syndicate

Coast 2050: Toward a Sustainable Coastal Louisiana

report of the

Louisiana Coastal Wetlands Conservation
and Restoration Task Force

and the

Wetlands Conservation and Restoration Authority

Louisiana Department of Natural Resources
Baton Rouge, La. 1998

We, the undersigned, do affix our signatures below, as representatives of the Federal Louisiana Coastal Wetlands Conservation and Restoration Task Force established in accordance with the Coastal Wetlands Planning, Protection and Restoration Act of 1990 ("Breaux Act"), in testimony of our unanimous support of the Coast 2050 Plan.



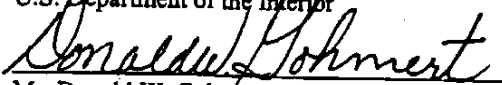
Col. William L. Conner
Task Force Chairman, District Engineer
U.S. Army Corps of Engineers, New Orleans
District



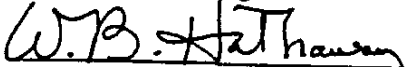
Mr. James Burgess
Office of Habitat Conservation
National Marine Fisheries Service
National Oceanic and Atmospheric
Administration
U.S. Department of Commerce



Mr. David W. Frugé
Field Supervisor
Fish and Wildlife Service
U.S. Department of the Interior



Mr. Donald W. Gohmert
State Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture



Mr. William B. Hathaway
Division Director, Water Quality Protection
U.S. Environmental Protection Agency

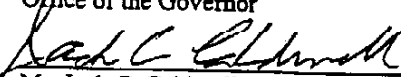


Dr. Leonard Bahr
Executive Assistant for Coastal Activities
Office of the Governor

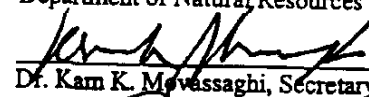
We, the undersigned, do affix our signatures below, as representatives of Louisiana's State Wetlands Conservation and Restoration Authority established in accordance with the Louisiana Coastal Wetlands Conservation and Restoration Act of 1989 ("Act 6"), in testimony of our unanimous support of the Coast 2050 Plan.



Dr. Leonard Bahr
State Wetlands Authority Chairman
Executive Assistant for Coastal Activities
Office of the Governor



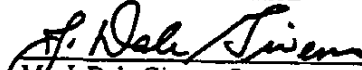
Mr. Jack C. Caldwell, Secretary
Department of Natural Resources



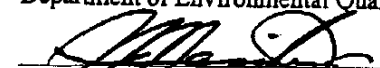
Dr. Kam K. Movassaghi, Secretary
Department of Transportation and Development



Mr. Mark Drennen, Commissioner
Division of Administration



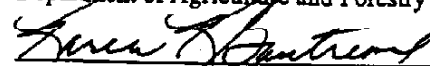
Mr. J. Dale Givens, Secretary
Department of Environmental Quality



Mr. James H. Jenkins, Jr., Secretary
Department of Wildlife and Fisheries



Mr. Bradley E. Spicer, Assistant Commissioner
Department of Agriculture and Forestry



Ms. Karen Gautreaux, Special Assistant for
Environmental Affairs
Office of the Governor

Written resolutions of support were also received from all of Louisiana's twenty coastal parishes for the strategies affecting their respective areas and for the Coast 2050 model of parish involvement. These resolutions are presented in the appendix.

reduce the amount of sediment deposition on the marsh surface (Reed et al. 1997) and may ultimately reduce the ability of affected marshes to keep pace with subsidence and sea level rise. Organic matter accumulation varies with vegetative type, and the zonation of swamps, fresh, brackish and saline marshes across the coast reflects gradients in salinity. Variations in sediment supply combine with gradients in salinity to produce complex patterns that control whether marshes can survive relative sea level rise—whether they are sustainable in the long-term. At present, different marsh types are maintained by different processes and the resulting diversity of habitat types is an essential characteristic of the productive coastal ecosystem.

Other Major Causes of Losses

Altered Hydrology

Navigation channels and canals dredged for oil and gas extraction have dramatically altered the hydrology of the coastal area. North-south channels and canals brought salt water into fresh marshes where the salinity and sulfides killed the vegetation. Saltwater intrusion, caused by channel deepening, endangers the potable water supply of much of the coastal region (Fig. 4-6). Canals also increased tidal processes that impacted the marsh by increasing erosion. East-west canals impeded sheetflow, ponded water on the marsh, and led to stress and eventual loss. Jetties at the mouth of the Mississippi River directed sediment into deep waters of the gulf.

Storms

Much of the coastal loss has occurred during storm events, which include not only hurricanes, but also storms related to passages of fronts, which are most severe in winter months. Within several days, storms can cause major landform alterations to barrier islands and the gulf shore. Alterations may include removal and redistribution of sediment and creation and alteration of inlets. Hurricane impact is the single most important factor in erosion and alteration of barrier islands. Damage may be equally devastating to muddy shorelines, banks and the marshes. Creation of a number of large lakes as the result of rupture and stripping away of root mats in floating marsh have been documented. Surge scour may also tear away rooted marsh vegetation. Salt water and plant materials pushed and thrown inland by storm surge and tide have also greatly altered marsh vegetation communities. In the Chenier Plain, for example, in 1957 Hurricane Audrey brought saline water into fresh marshes and caused extensive loss.

Interior Marsh Loss

Much land loss and marsh deterioration along the Louisiana coast has occurred where fresh marshes and swamps have been subjected to marine tidal processes, usually the result of subsidence and exacerbated by canal dredging. In such areas the marshes are affected by several factors. First is the invasion of higher salinity water and related sulfide formation, which kills the fresh and intermediate vegetation that makes up

the floating mats. In some instances, the fresh and intermediate grasses are replaced by more salt-tolerant, brackish vegetation, but such vegetation can only successfully colonize areas of firm substrate. Consequently, floating marshes and marshes with poorly consolidated substrate do not make the transition to brackish and saline marsh, but instead revert to unvegetated mud flats.

Secondly, if breaches occur in the skeletal framework of natural levee ridges and lake rims which hold the fresh and intermediate marshes together, a tidal pumping process quickly removes the fluid and semi-fluid soils and the barren mud flats are converted to ponds, lakes, and bays.

Edge Erosion

In the past 100 years, the total barrier island area in Louisiana has declined 55% (Fig. 4-7), at a rate of 155 acres per year (Williams et al. 1992), largely due to storm overwash and wave erosion. In many ways the shorelines of bays and lakes and the banks of canals and streams are even more vulnerable to erosion than the barrier islands. The Louisiana coast has approximately 350 miles of sandy shoreline along its barrier islands and gulf beaches; however, there are about 30,000 miles of land-water interface along the bays, lakes, canals and streams. Most of these consist of muddy shorelines and banklines, and virtually all are eroding. In many instances, rims of firmer soil around lakes and bays, and natural levees along streams have eroded away leaving highly

organic marsh soils directly exposed to open water wave attack.

Herbivory

Nutria, accidentally released in the 1930's, became unprofitable to trap in the 1980's. The nutria multiplied rapidly and grazed heavily on marsh plants. This grazing imposed additional stress on marsh plants, frequently resulting in mortality, as well as physically disrupting the substrate, thereby accelerating marsh loss. This destruction of wetland plants has been well documented in the Barataria and Terrebonne Basins.

Dredge and Fill Activities

Prior to the regulation of dredge and fill activities in wetlands, large areas of swamp and marsh were converted into fastlands for agricultural, residential and industrial uses. This practice has been almost completely halted, but dredge and fill for petroleum exploration, pipelines, canal developments, and industrial uses have directly and indirectly contributed to marsh destruction.

Consequences of Land Loss

The consequences of massive landscape change and ecosystem deterioration are real for all coastal communities. Some swamps and marshes are presently surviving relative sea level rise and provide the basis for our productive coastal fishery. Not all parts of the system can survive in this way.



United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

03 DEC -1 PM 3:40

In Reply Refer To: MS5410

12/2/03
RA 946 DRA 76 NEPA OK
Public Affairs SRA SDRA
Copy/ ✓ F/SER2 F/SERX1
Orig/ ✓ F/SER3 F/SERX2
Route ✓ F/SER4 F/SERX3
Budget Comp Ops
Action FYI Date 12/2/03
Return to
NOV 25 2003

Dr. Roy E. Crabtree
Regional Administrator
National Marine Fisheries Service
9721 Executive Center North
St. Petersburg, Florida 33702

Dear Dr. Crabtree:

Enclosed are comments from the Minerals Management Service on the Draft Environmental Impact Statement (DEIS) for the Generic Essential Fish Habitat Amendment to the following fishery management plans of the Gulf of Mexico (GOM): Shrimp Fishery; Red Drum Fishery; Stone Crab Fishery; Coral and Coral Reef Fishery; Spiny Lobster Fishery of the GOM and South Atlantic; and the Coastal Migratory Pelagic Resources of the GOM and South Atlantic.

We appreciate the opportunity to review the subject DEIS. If you have any questions regarding these comments, please contact Mr. Gregory S. Boland at (504) 736-2740.

Sincerely,

Chris C. Oynes

Chris C. Oynes
Regional Director

Enclosure

cc: Office of Strategic Planning
N/SP, SSMC3 Room 15743
1315 East-West Highway
Silver Spring, Maryland 20910

Comment Matrix				
Draft EIS for				
Generic Essential Fish Habitat(EFH) Amendment to Fishery				
Management Plans of the Gulf of Mexico (GOM)				
DEIS REVIEW			Reviewer	
#	Page	Location Section Paragraph		
1	General		There is an internal inconsistency between sections apparently written by authors with different perspectives of the oil and gas industry. In sections dealing with artificial reefs, and in the descriptions of habitat used by many managed species, oil and gas platforms are considered as beneficial and valuable for many different life stages. In other sections, unsupported claims and speculation is presented that implicates oil and gas drilling and normal production operations as a continued threat to both fisheries and habitat. Pure speculation as to the impacts from a particular source is inappropriate in an environmental impact statement (EIS) document that demands the best available science for its analysis.	GSB
2	4-76	4.3.8.4	This EFH EIS is obviously oriented to the <i>significant benefits</i> or positive impacts EFH policy could have on managed fisheries and habitat. However, the negative impacts of EFH policy should also be analyzed. This seems to be trivialized in Section 4.3.8.4, with only passing mention of impacts to the fishing industry by increasing restrictions. The EIS statement " <i>Detrimental effects of any restrictions on fishing activities would be expected to be relatively short term, with losses more than balanced by long-term gains in fish abundances.</i> " appears to justify a lack of any further detailed consideration of EFH policy impacts. "We disagree and believe this subject should be analyzed in more detail. Multigenerational fishing families driven out of their livelihoods will not gain much satisfaction from the knowledge that fish abundances will likely increase in the "long-term."	GSB
3	3-24	3.2.1.1.2	One of many examples of speculation about the source of impacts is the sentence " <i>It seems likely, in light of the general decline of living resources reported for Mobile Bay that the seagrasses are among the losers due to dredging, oil and gas exploration, and other anthropogenic impacts.</i> " Without evidence from any research, the citation of just two impacting factors is inappropriate. Some detail and qualification is needed.	GSB
4	3-155 3-159 3-162		These three turtle sections all have statements in the list of "known" sources of impacts stating, "The known sources of impacts to green turtles include...oil and gas exploration, development,..." We are not aware of any studies documenting known impacts to any species of sea turtle due to drilling and development. Evidence of any studies must be included to make this kind of sweeping statement.	GSB

MMS1

MMS2

MMS3

MMS4

Comment Matrix Draft EIS for Generic Essential Fish Habitat(EFH) Amendment to Fishery Management Plans of the Gulf of Mexico (GOM)					Reviewer
DEIS REVIEW					
#	Page	Location Section	Paragraph		
5	3-273	3.5.3.1.2	2	This section, which discusses activities in the eastern Gulf, is outdated by several years. There will be no activities related to the Destin Dome because the State of Florida did not allow development of the gas field in that offshore area. The Gulfstream pipeline has been completed for more than a year, and there has been no documentation of significant degradation of sensitive marine habitats important to commercial and recreational fisheries, as indicated by the quote from the Department of Commerce in this paragraph. Live-bottom impacts from pipeline burial were heavily mitigated by a multiplier of very conservative impact estimates at extraordinary expense.	GSB
6	3-280			The summary of Shinn et al. 1993 is not objective. The description of the impacted area was altered from the units in the report (acres to meters). <i>"The area impacted by cuttings and debris varied from a few meters to over 13,000 m²."</i> The low end should at least be square meters and not just meters, but the maximum area was still a relative small area quoted in the report abstract as 3 acres, not 13,000 square meters (which is only a square of 114 m on a side). One major conclusion of the Shinn et al (1993) report was completely eliminated, i.e., <i>"As expected, those sites with the most debris and/or open boreholes attracted the most abundant and diverse fish fauna."</i>	GSB
7	3-286	3.5.3.2.2. 3	4	The source of additional speculation is not identified in this paragraph. <i>"...as part of NOAA's NST Program petroleum hydrocarbons were measured in Gulf of Mexico oyster and sediment samples, ... The results showed... (2) chronic petroleum contamination is taking place, possibly from oil and gas operations along the Gulf of Mexico coastline,..."</i> ending with an MMS Lease Sale EIS publication reference. I do not believe MMS would speculate that chronic oiling of oysters was from oil and gas operations. Was this part of the conclusions by NOAA? Any reasonable speculation of a source for chronic oiling of the Gulf of Mexico would include the conservative estimate of 10,000,000 gallons of oil per year released into the Gulf from naturally occurring seepage.	GSB
8	3-294	3.5.4.1	2	Also repeated on page 4-76: Statements in this section are exaggerated; the most obvious being <i>"Oil and gas operations...can...contaminate the pelagic zone making it uninhabitable by aquatic organisms."</i> This is a very strong statement and deserves some detail to define this "uninhabitable pelagic zone." If produced-water discharges are implied, this "contaminated pelagic zone" extends no more than 1 or 2 meters from the discharge point in one prominent study off Texas (references available).	GSB
9	3-295	3.5.4.1	2	Also repeated on page 4-69: <i>"If oil and gas operations along the Florida coastline were ever approved, risks to sensitive nearshore and estuarine habitats would increase."</i> If this is the result of some impact analysis, a reference should be given. If it is an unresearched opinion by the author, it is inappropriate for this EIS. The overall risk to nearshore habitats is more complicated than the simple statement above and would be determined by all impacting factors including the use of tankers to transport necessary hydrocarbons to nearshore areas of Florida, an activity that would be reduced by offshore oil and gas operations and pipelines.	GSB

MMS5

MMS6

MMS7

MMS8

MMS9

Comment Matrix					Reviewer
Generic Essential Fish Habitat(EFH) Amendment to Fishery Management Plans of the Gulf of Mexico (GOM)					
#	Location		Paragraph	DEIS REVIEW	
	Page	Section			
10	4-3	4.1.1	2	Also repeated on page 4-16. This section includes undocumented claims of evidence of continuing impacts to geological structures and marine habitats as follows: <i>"Non-fishing activities that have and continue to adversely affect geological structure and marine habitats include dredging, scraping, sand and mineral mining, oil and gas exploration (drilling), ..."</i> Subsidence due to the production of oil and gas is implicated in another sentence. If there is any documentation of a federally managed marine habitat being adversely affected in the Gulf of Mexico by subsidence due to oil or gas extraction, it should certainly be cited here. If there is no evidence, this statement should be modified to reflect the best science available as required by NEPA. The statement in this paragraph is misleading, implying that the presence of numerous structures and pipelines in the western Gulf has caused some kind of "extreme" negative impact. From page 4-74: <i>"However, offshore, particularly in the western Gulf, the past impacts from oil and gas activities are extremely great. Figures 3.2.8 and 3.2.9 show the distribution of oil and gas structures and pipelines, respectively. There are an estimated 4,000 platforms in the Gulf."</i> If the physical presence alone is implicated as the impact, it should be defined as a positive impact as an artificial reef complex as directly stated in numerous other sections of the EIS. If the implication is a negative one, there must be some qualification of what sources are causing this "extremely great" impact and how.	GSB
11	4-74	4.3.8.2	2	This same paragraph continues with even more misleading implications: <i>"Many impacts to the physical environment, e.g. loss of geologic formations, clay banks, coral reefs, may be considered permanent for all intents and purposes as the time frames required to reform them are on the order of hundreds or thousands of years."</i> The only offshore activities near coral reefs discussed in this context were oil and gas activities. Perhaps the author is unaware of the distribution of coral reefs in the Gulf of Mexico. The only coral reefs in the northern GOM are the East and West Flower Garden Banks. They are surrounded by active oil and gas operations. One operation is within 1 mile of the reef itself on the East Flower Garden Bank. Both reefs have been continuously monitored and shown to be healthy pristine coral reef systems for the past 30 years. They, are in fact, the healthiest reefs in the western hemisphere and have not been impacted by oil and gas activities in the immediate vicinity in any measurable way.	GSB

Reviewer: Please provide your name, title, commercial phone number, and date of comments

- GSB Gregory S. Boland, Biological Oceanographer, MMS, GOM Region-LE, (504) 736-2740, Gregory.Boland@mms.gov, 18 November 2003.

CL&F RESOURCES LP
CONTINENTAL LAND & FUR CO., INC.

111 VETERANS MEMORIAL BLVD., SUITE 500

METAIRIE, LOUISIANA 70005-3099

TELEPHONE 504/378-9378

TELECOPIER 504/378-4398

November 25, 2003

FAX: 727-570-5320

Dr. Roy E. Crabtree
Regional Administrator
NOAA Fisheries
9721 Executive Center Drive North
St. Petersburg, Florida 33702

RA <u>Mc</u>	DRA <u>CI</u>	NEPA <u>DL 12/5/03</u>
Public Affairs	SRA	SDRA
<input checked="" type="checkbox"/> Copy	FISER2	FISERX1
<input checked="" type="checkbox"/> Orig	FISER3	FISERX2
<input type="checkbox"/> Route	FISER4	FISERX3
<input type="checkbox"/> Budget		Camp Ops
Action	FTI	Date <u>12/2/03</u>
Return to		

RE: Draft Environmental Impact Statement (DEIS) for the Generic Essential Fish Habitat Amendment to the following Fishery Management Plans of the Gulf of Mexico (GOM)

Dear Dr. Crabtree:

Continental Land & Fur Co., Inc. (CL&F) owns approximately 127,000 acres located in the upper Penchant sub-basin of the Terrebonne basin, all of which is located in Townships 17 and 18 South, Ranges 12, 13, 14 and 15 East, Terrebonne Parish, Louisiana. CL&F has owned and managed its property for over 70 years, the vast majority of which is classified as a freshwater organic flotant marsh. We appreciate the opportunity to provide comments on the DEIS.

CLF1

The following statement, contained in several sections of the DEIS, "EFH has no direct impact on the physical, biological, or administrative environments, but it is likely to result in controversy in the human environment" is inaccurate. To illustrate this point, CL&F filed a permit application (CY-20-030-4155) with the U. S. Army Corps of Engineers, New Orleans District, to manage the hydrology of a 2,000-acre freshwater marsh system. The project area is comprised of a freshwater floating marsh and areas of solid-substrate fresh marsh due to the influence of the nearby lower Atchafalaya River. Even with the sediment from the river, this area is experiencing marsh loss, due to excessive water exchange. The land loss can be easily identified by comparing aerial photography shot over the years. The project is needed because the perimeter of the project area has breaches which facilitate excessive water exchange within the system. The project's primary objective is to reduce the water exchange which is causing land loss. After project implementation, the project area will continue to receive nutrients and sediments through the proposed weirs and over bank flooding of the existing low spoilbanks and natural levees in the area. NMFS opposes the issuance of this permit.

CLF1

Simply stated, current EFH policy provides that marine fishery access and EFH are more important in the short-term than a landowner's long-term conservation of property. In our opinion EFH has a DIRECT impact on the physical, biological, and administrative environments particularly when one considers that CL&F's property is a fresh water environment which provides limited foraging and nursery habitat for fresh water tolerant fishes and shellfishes.

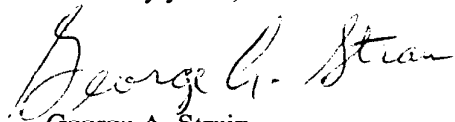
Dr. Roy E. Crabtree
NOAA Fisheries
November 25, 2003
Page 2

Undoubtedly, there are similar properties in south Louisiana that are adversely affected by the same EFH policy.

Louisiana is trying to obtain \$14 billion dollars in federal funding to implement the Louisiana Coastal Area Plan which is a massive coastal restoration program. There is something terribly wrong when Louisiana is asking for federal assistance and, at the same time, a landowner is denied the right to try to save private property with private funding. Placing more emphasis on fisheries access and the perpetuation of marine organisms over protecting wetlands needs to be reevaluated, and by way of this correspondence, CL&F is asking you to do just that. The EFH policy may work in other states, but it needs to be changed in Louisiana in order for our wetlands to be saved through restoration and management programs.

Thank you again for the opportunity to provide these comments.

Sincerely yours,

A handwritten signature in cursive script that reads "George A. Strain".

George A. Strain
Vice President

GAS/crd
Encl.



November 26, 2003

Dr. Roy Crabtree, Southeast Regional Administrator
National Marine Fisheries Service, Southeast Region
9721 Executive Center Drive, North
St. Petersburg, Florida 33702

Dear Dr. Crabtree:

On behalf of the Monroe County Commercial Fishermen, Inc., Southeastern Fisheries Association, Inc. and the Southern Offshore Fishing Association, I would like to provide my comments regarding the Draft Environmental Impact Statement (EIS) for the Generic Essential Fish Habitat Amendment (EFH) in the Gulf of Mexico. I would also like cite the materials that I used to develop my testimony, as well as provide in detail my concerns given during that testimony in July 2003 at the GMFCM in Naples.

Section 2 EFH Alternatives 2.1.4.2.2.1 Sensitivity of habitats to fishing impacts:

MCCF1

The definitions that categorize potential habitat damage, called *fishing gear sensitivity* are confusing and not practical. It is my opinion that the definitions are vague enough and leave enough latitude for interpretation that the NMFS will be forced to prevent, mitigate or minimize the impacts of almost every activity that occurs in the Gulf of Mexico.

A negative interpretation of gear impacts is evident in the description of the Minor fishing gear sensitivity category. This "minor" category states that the gear is capable of moderate impacts to habitat rather than minor impacts. Furthermore, if you read the definitions for all the sensitivity categories 3 out of the 4 rankings claim to result in impaired habitat function (see attachment A). These fishing gear sensitivity definitions are obviously flawed. Since the analysis on page 2-38 admits this information and rankings are based on limited, speculative and qualitative evaluation, then NMFS should correct the document to insure the evaluation of the gear impacts is consistent and unbiased.

MCCF2

Consequently the rankings of gear impacts in Table 3.5.1 (Attachment B) and the gear specific management alternatives considered in the EIS that are based on this table often are incorrect and inappropriate because they claim greater gear impacts than actually occur. For example, the rankings contained in Table 3.5.1 that depict spiny lobster and stone crab traps as having a Moderate (++) impact on Hard Bottoms and Coral Reefs does not consider best scientific information available and therefore should be changed to Minor (+). I have included a citation from Final Report NOAA/NMFS Contract No: NFFN7400-2-00021.

"Preliminary findings on the impacts of traps on coral suggests that a relatively small percentage (<20%) of the traps set in shallow water (<35m) contact hard corals, gorgonians, or sponges. In these limited observations, damage to stony corals and was patchy, at a scale less than the total trap footprint"

P.O. BOX 501404 MARATHON, FLORIDA 33050 PHONE: (305) 743-0294 FAX: (305) 289-1207
E-MAIL : mccf@ddtcom.com

03 DEC 1 11:30 AM
RECEIVED

MCCF2

Furthermore, Table 3.5.1 (Attachment B) depicts spiny lobster and stone crab traps as having a Minor (+) impact on Submerged Aquatic Vegetation (SAV) does not consider best scientific information available and therefore be changed to Negligible (0). Below I have included a citation from a recent study completed by the National Ocean Service entitled **The Effect of Spiny Lobster Traps on Seagrass Beds of the Florida Keys National Marine Sanctuary: Damage Assessment and Recovery.**

"We conclude that traps must be recovered in a six week period, beyond which, injury to seagrass beds is predicted. Within the limits of these testing parameters, it appears that standard fishing practices (typically < five-week soak time) should not result in significant injury to seagrass beds in the Florida Keys"

2.2.2 HAPC – Alternative 9: The following areas are identified as HAPC's:

MCCF3

I would also like to voice my opposition to the Council's decision to add Pulley's Ridge as another HAPC to be added to this Alternative. While it was an agenda item it was not advertised as being considered as a HAPC. The designation of this area as a HAPC under the current rules would make it off-limits to any gear that interfaces with the bottom, effecting a commercial fishing closure. The decision to include Pulley's Ridge as an HAPC did not consider its possible adverse economic impacts that would be caused due to displacing spiny lobster fishermen, bandit and long-line fishermen. Furthermore, the decision was made the same morning after a short video presentation given by the USGS where very little useful information was provided or even available. I provided the briefing materials (Attachment C) that was provided to the Council about "Pulley's Ridge" to illustrate the lack of information available to the Council at the time they made their decision.

2.2.3 Minimizing the adverse effects of fishing on EFH – Alternative 6

MCCF4

The stated purpose of this alternative is to prevent, mitigate, or minimize adverse fishing impacts by implementing 5 action items that range from minor modifications to complete closures of fishing activities and fishing gear. In our opinion these 5 action items discriminate between fishermen because of the type of fishing gear they use. (Attachment D)

Fishing activities listed in the action items contained in this alternative include, vertical line fishing gear, anchoring, bottom longlines, buoy gear, traps/pots and bottom trawling. All of these gears can have some impact on coral reefs through direct contact. Yet the alternatives to prevent these impacts do not consider each gear type equitably.

For example Action Item 1 in this alternative regulates the use of bottom vertical fishing gear only on coral reefs that occur inside of HAPCs and Action Item 2 prohibits bottom anchoring only on coral reefs inside of HAPCs. Similarly Action Item 3 should be worded in such a way to prohibit bottom longlines, buoy gear and trap/pots from coral reefs inside HAPCs instead of its current wording and intent that would prohibit it from all coral reefs. It is very likely that vertical fishing gear has an impact on coral reefs that is equal to or greater than bottom longlines and lobster/stone crab traps. Below I have included a citation from a recent study conducted by the Center for Marine Science and NOAA's National Undersea Research Center, entitled: **Occurrence and biological impacts of fishing gear and other marine debris in the Florida Keys.**

"Debris types causing the greatest degree of damage were hook-and-line gear (68%), especially monofilament line (58%), followed by debris from lobster traps (26%), especially rope (21%). Hook and line gear accounted for the majority of damage to branching gorgonians (69%), fire coral (83%), sponges (64%), and colonial zoanthids (77%)."

Furthermore, there is no scientific evidence provided or cited that would compel the Council to decide that vertical line fishing gear or anchoring should not be prohibited on coral that occurs outside of HAPCs, and certainly there was no evidence that would provide a rationale for the Council to determine that commercial fishing gear should be prohibited from all coral reefs?

MCCF4

After review of the Council minutes on this subject I find that the administrative record (refer to June and July 2003 Council minutes) is lacking in justification and meaningful discussion or rationale to allow or regulate some fishing activities to occur on coral reefs outside HAPCs while prohibiting other gear on coral reefs outside of HAPCs.

Regulation of all gear and fishing impacts on coral reefs should be done consistently. I urge the Council limit gear impacts to coral that occurs in HAPCs, since HAPCs are designed to protect known coral reef habitats in the Gulf, and I strongly disagree that certain activities should be prohibited while others are deemed allowable.

Sincerely,



Gregory P. DiDomenico
Executive Director

Monroe County Commercial Fishermen, Inc

reefs, hard/live bottom, mangroves, seagrasses, and marshes are particularly sensitive to human-induced environmental degradation. They are sensitive to fishing gears and other activities such as dredging, mining, pipeline construction, coastal development, shipping, contaminants, and disposal.

In developing metrics for sensitivity, we have considered the inherent susceptibility of habitats to fishing and non-fishing impacts that are likely to result in impairment of the function of the habitat for fish species. This does not mean these impacts and the impairment have occurred, are occurring or will necessarily occur in the future. It is merely a measure of the potential for impairment given the types of activities that could affect the habitat, and the natural characteristics and situation of the habitats themselves.

The methods used to develop indices of habitat sensitivity are described in this section. The types and extent of fishing and non-fishing impacts on habitat are presented in detail in Section 3.5.

An evaluation of fishing impacts is important both in the identification of potential sites of HAPC, EFH Final Rule (600.815(a)(2)), and to provide guidance on the types of impacts that need to be prevented, mitigated, or minimized under the requirements of the M-S Act. In addition to providing a metric for identifying HAPCs, the evaluation of non-fishing impacts contributes to the evaluation of the likely benefits of possible modifications to fishing activity by providing information about cumulative impacts. Bearing in mind that only reasonably foreseeable changes to non-fishing activities can be considered in this EIS, an evaluation of non-fishing impacts is important in evaluating the practicability of the fishing impacts alternatives (Section 2.1.6.4).

A

2.1.4.2.2.1 Sensitivity of habitats to fishing impacts

Different fishing gears affect habitats to different degrees. Mobile gears, such as bottom trawls and dredges, have a potential to affect habitat over a wide area, because the gear is in direct contact with and moves across the substrate and any biogenic structures. Non-mobile gears fish primarily in a fixed location, so their direct effects on habitat are generally confined to that location or "footprint." The damage from a single encounter in either case can range from negligible to severe. However, the adverse effects on EFH of fishing that are to be prevented, mitigated, or minimized relate to the functional relationship between habitat and fish. At this time, only limited information exists to relate fishing activities to habitat damage (Rester 2000, Hamilton 2000, Barnette 2001, Johnson 2002, NRC 2002), and there is no basis yet for a quantitative link between habitat damage and habitat function. Therefore only a speculative, qualitative evaluation of the degree of impairment of the function of the habitat for fish species and life stages that results from these impacts can be made. Nevertheless, attempts have been made to combine these concepts – the likely degree of damage from a single encounter, and the resulting impaired function for fish – to create a scale of potential habitat damage that we have called the *fishing gear sensitivity*:

- High (3 or +++): Capable of severe damage to a wide swath of habitat during a single encounter. Seriously impairs the function (for fish) of the impacted habitat.

A

- Moderate (2 or ++): Capable of severe damage to habitat in a “footprint” of the gear during a single encounter; or capable of moderate damage to habitat over a swath. Impairs the function (for fish) of the habitat.
- Minor (1 or +): Capable of moderate damage to habitat in a limited area during a single encounter. May impair the function (for fish) of the habitat.
- Negligible (0): Does not typically cause damage. No perceptible impairment to the function (for fish) of the habitat.

Damage in the high category would involve widespread and severe damage from a single encounter that seriously impairs the ecological function of that habitat for managed fish species, while ‘negligible’ indicates no appreciable impairment to the ecological function of the habitat. The analysis of fishing sensitivity involved an evaluation and weighting of each of the fishing impact types for a given habitat type, based on best scientific judgment and literature reports.

A fishing gear sensitivity score is allocated to each potential combination of habitat type and fishing gear. These relative measures are primarily taken from rankings developed during a 1999 NOAA Fisheries workshop on gear impacts on essential fish habitat in the NOAA Fisheries Southeast Region (Hamilton 2000, Barnette 2001) and additional discussions of gear and habitat by Barnette. The NOAA Fisheries habitat-gear ranking did not include all the habitats or gears analyzed for the Gulf of Mexico. Members of the Council’s EIS advisory panels provided recommendations that assisted in ranking habitat-gear combinations not included in the NOAA Fisheries habitat-gear rankings.

The NOAA Fisheries workshop report did not include sensitivity rankings for the following habitats: mangroves, drift algae, emergent marshes, and coral reefs. Limited assessment was done for oyster reefs and pelagic habitats. Other than coral, oyster reef, and drift algae, these habitats are largely unaffected by fishing gears. This is either because the interaction is essentially benign, as in the pelagic habitat, or because gears cannot physically be used in the habitat, such as mangroves and emergent marshes. The sensitivity of coral was considered to be similar to hard bottom, but with more fragile structure and higher sensitivity to some gears. Drift algae can be picked up in pelagic nets, so some habitat sensitivity was considered in this interaction.

The workshop report also did not include the following gears in their analysis: roller frame trawl, pair trawl, crab scrape, tongs, or drop net. Barnette (2001) described available information on habitat impacts for crab scrape, tong, and barrier net, and this information formed the basis for sensitivity values on various habitats. Where information existed for similar gears, the fishing gear sensitivity was assigned by analogy. The roller frame trawl was considered as intermediate in score to roller trawls and frame trawl. The pair trawl was considered comparable to a shrimp otter trawl, but without doors. Drop nets (Section 3.5.2.1.13) are set flat on the bottom, and catch fish (mainly crabs) by lifting; this gear may have a minor impact on coral. Channel nets (Section 3.5.2.1.13) are a static gear that are attached to a structure in the water such as a dock or piling when a current is running, and they do not usually contact the bottom. Channel nets may capture

Table 3.5.1 Ranks of habitat sensitivity to specific gear types. Table is based on those found in Barnette (2001) and Hamilton (2000), with additions and modifications. Shaded areas indicate moderate and high impacts

- **High** (3 or +++): Capable of severe damage to a wide swath of habitat during a single encounter. Seriously impairs the function (for fish) of the impacted habitat.
- **Moderate** (2 or ++): Capable of severe damage to habitat in a "footprint" of the gear during a single encounter, or capable of moderate damage to habitat over a swath. Impairs the function (for fish) of the habitat.
- **Minor** (1 or +): Capable of moderate damage to habitat in a limited area during a single encounter. May impair the function (for fish) of the habitat
- **Negligible** (0): Does not typically cause damage. No perceptible impairment to the function (for fish) of the habitat.
- **N/A** = Not applicable or not possible.

	Fish Otter Trawl	Shrimp Otter trawl	Roller frame trawl	Skimmer trawl	Pair trawl	Bottom longline & Buoy	Fish crab trap	Blue crab trap	Lobster trap	Stone crab trap	Vertical gear	Spear & Power- head	Slurp gun	Crab scrape	Oyster dredge	Rake	Tong	Patent tong
Estuarine																		
SAV	++	++	+	+	+	+	++	+	+	+	+	0	0	+	++	++	+	++
Mangroves	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drifting algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Emergent marshes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	N/A	0	N/A	N/A	N/A	N/A	N/A
Sand/shell bottoms	++	+	+	+	+	+	0	0	0	0	0	0	0	+	++	++	0	++
Soft bottoms	++	++	++	+	++	+	0	0	0	0	0	0	0	++	++	++	+	++
Hard bottoms	++	++	++	++	++	+	++	+	++	+	+	+	0	++	++	++	+	++
Oyster reefs	++	++	++	++	++	0	0	0	0	0	+	+	0	++	++	++	+	++
Pelagic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Nearshore																		
SAV	++	++	+	+	+	+	++	+	+	+	+	0	0	+	++	++	+	++
Mangroves	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drifting algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sand/shell bottoms	++	+	+	+	+	+	0	0	0	0	0	0	0	+	++	++	0	++
Soft bottoms	++	++	++	+	++	+	0	0	0	0	0	0	0	++	++	++	+	++
Hard bottoms	++	++	++	++	++	+	++	+	++	+	+	+	0	++	++	++	+	++

6

	Fish Otter Trawl	Shrimp Otter Trawl	Roller frame trawl	Skimmer trawl	Pair trawl	Bottom longline & Buoy	Fish trap	Blue crab trap	Lobster trap	Stone crab trap	Vertical gear	Spear & Power- head	Slurp gun	Crab scrape	Oyster dredge	Rake	Tong	Patent tong
Coral Reefs	++	++	++	++	++	++	++	++	++	++	+	+	+	++	++	++	+	
Pelagic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offshore																		
SAV	++	++	+	N/A	+	+	++	N/A	-	+	+	0	0	N/A	N/A	N/A	N/A	N/A
Drifting algae	0	0	0	N/A	0	0	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Sand/shell bottoms	++	+	+	N/A	+	+	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Soft bottoms	++	++	++	N/A	+	+	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Hard bottoms	++	++	++	N/A	+	+	++	N/A	+	+	+	+	0	N/A	N/A	N/A	N/A	N/A
Coral Reefs	++	++	++	N/A	++	++	++	N/A	++	++	+	+	+	N/A	N/A	N/A	N/A	N/A
Shelf edge/ slope	++	++	++	N/A	+	+	+	N/A	+	+	+	0	0	N/A	N/A	N/A	N/A	N/A
Pelagic	0	0	0	N/A	0	0	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A

	Hand harvest	Dip net	Bully net	Snare	Seine	Purse Seine	Drop net	Push net	Pound net	Channel net	Trammel net	Benthic gill net	Barrier net	Cast net	Butter- fly Net	Hoop Net	Harpoon	Allowable Chemical
Estuarine																		
SAV	0	0	0	0	+	+	0	+	0	0	+	+	0	+	0	+	0	0
Mangroves	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drifting algae	0	0	0	0	+	+	0	+	0	+	0	0	0	0	0	0	0	0
Emergent marshes	0	0	0	0	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	+	N/A	N/A	N/A	N/A
Sand/shell bottoms	0	0	0	0	+	+	0	0	0	0	+	+	0	0	0	+	0	0
Soft bottoms	0	0	0	0	+	+	0	0	0	0	+	+	0	+	0	+	0	0
Hard bottoms	+	+	+	+	+	+	0	0	N/A	0	+	+	+	+	N/A	+	0	+
Oyster reefs	0	0	0	0	+	+	0	0	N/A	0	+	+	+	+	N/A	+	0	0
Pelagic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nearshore																		
SAV	0	0	0	0	+	+	0	+	0	0	+	+	0	0	0	+	0	0
Mangroves	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drifting algae	0	0	0	0	+	+	0	+	0	+	0	0	0	0	0	0	0	0
Sand/shell bottoms	0	0	0	0	+	+	0	0	0	0	+	+	0	0	0	+	0	0

Soft bottoms	0	0	0	0	+	+	+	0	0	0	+	0	+	0	0
Hard bottoms	+	+	+	+	+	+	+	+	N/A	0	+	0	+	0	+
Coral Reefs	+	+	+	+	++	++	++	+	N/A	0	+	0	+	+	+
Pelagic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offshore															
SAV	0	0	0	0	N/A	+	+	+	N/A	N/A	N/A	N/A	N/A	N/A	0
Drifting algae	0	0	0	0	N/A	+	0	0	N/A	N/A	N/A	N/A	N/A	N/A	0
Sand/shell bottoms	0	0	0	0	N/A	+	+	+	N/A	N/A	N/A	N/A	N/A	N/A	0
Soft bottoms	0	0	0	0	N/A	+	+	+	N/A	N/A	N/A	N/A	N/A	N/A	0
Hard bottoms	+	+	+	+	N/A	+	+	+	N/A	N/A	N/A	N/A	N/A	N/A	+
Coral Reefs	+	+	+	+	N/A	++	+	+	N/A	N/A	N/A	N/A	N/A	N/A	+
Shelf edge/ slope	0	0	0	0	N/A	0	0	0	N/A	N/A	0	0	N/A	N/A	0
Pelagic	0	0	0	0	N/A	0	0	0	N/A	N/A	0	0	N/A	N/A	0

NOTE: The approximate boundary between nearshore and offshore is the 60 foot (i.e. 18 meter) depth line.

NOTE: The approximate boundary between nearshore and offshore is the 60 foot (i.e. 18 meter) depth line.

Pulley Ridge – the US's Deepest Coral Reef?

Robert B. Halley, Virginia E. Garrison, Katherine T. Ciembronowicz,
Randy Edwards
USGS, FISC, St. Petersburg, FL 33701

Walter C. Jaap
Florida Marine Research Institute, St. Petersburg, FL

Gail Mead, Sylvia Earle
Sustainable Seas Expedition

Albert C. Hine, Bret Jarret, Stan D. Locker, David F. Naar, Brian Donahue
Center for Coastal Ocean Mapping, College of Marine Science, University
of South Florida, St. Petersburg, FL

George D. Dennis
USGS, FISC, Gainesville, FL

David C. Twichell
USGS, Woods Hole, MA

Pulley Ridge is a 100+ km-long series of N-S trending, drowned, barrier islands on the southwest Florida Shelf approximately 250 km west of Cape Sable, Florida (Fig. 1). The ridge has been mapped using multibeam bathymetry, submarines and remotely operated vehicles, and a variety of geophysical tools. The ridge is a subtle feature about 5 km across with less than 10 m of relief. The shallowest parts of the ridge are about 60 m deep. Surprisingly at this depth, the southern portion of the ridge hosts an unusual variety of zooxanthellate scleractinian corals, green, red and brown macro algae, and typically shallow-water tropical fishes.

The corals *Agaricia* sp. and *Leptoceris cucullata* are most abundant, and are deeply pigmented in shades of tan-brown and blue-purple, respectively. These corals form plates up to 50 cm in diameter and account for up to 60% live coral cover at some localities. Less common species include *Montastrea cavernosa*, *Madracis formosa*, *M. decactis*, *Porities divaricata*, and *Oculina tellena*. Sponges, calcareous and fleshy algae, octocorals, and sediment occupy surfaces between the corals. Coralline algae appear to be producing as much or more sediment than corals, and coralline algal nodule and cobble zones surround much of the ridge in deeper water (greater than 80 m).

C

Is southern Pulley Ridge the US's deepest coral reef? That depends, of course, on one's preferred definition of a coral reef. There are deeper, ahermatypic coral buildups both in the Gulf of Mexico and Atlantic off Florida coasts. Classically, a coral reef is a wave resistant structure built by hermatypic corals and hazardous to shipping. From a geologist's point of view, Pulley Ridge corals appear to have built a biostrome, an accumulation at least a few meters thick, although corals may not account for the bulk of the topography. From that of a biologist, the most abundant corals in the ridge are hermatypic corals but they are lying, mostly unattached, on the surface. Clearly a ship's captain could not run his vessel aground on this reef, so mariners would not consider this a reef. Nevertheless, from the scientific perspective of a structure built from hermatypic corals, southern Pulley Ridge may well be the deepest coral reef in the United States.

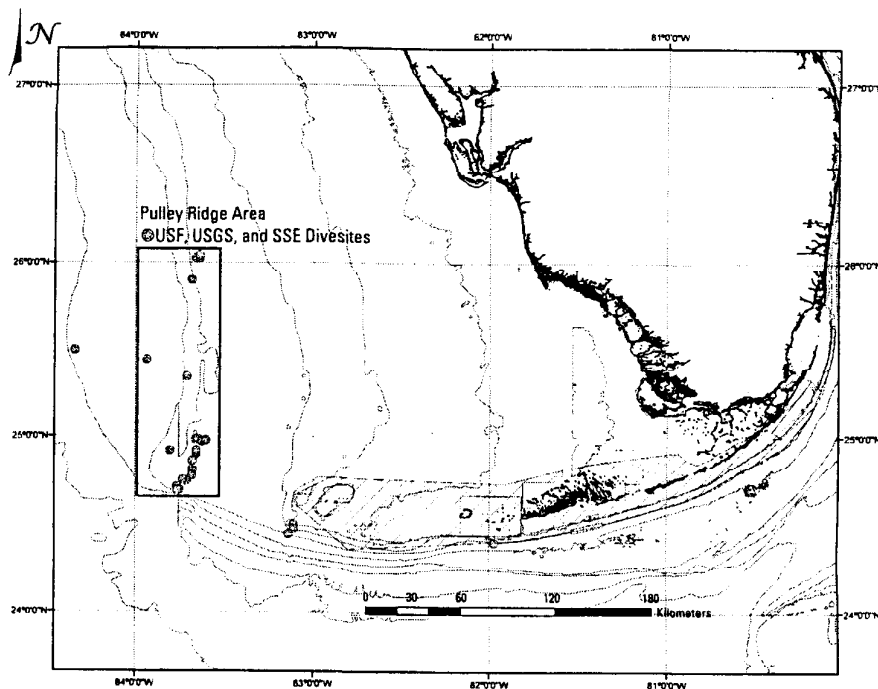


Figure 1. Location of Pulley Ridge study area and divesites.

Robert B. Halley, Center for Coastal and Watershed Studies, 600 4th St.
South, St. Petersburg, Florida 33701
Phone: (727) 803-8747 ex. 3020, FAX (727) 803-2032
rhalley@usgs.gov

activities should result in incremental improvements and restoration from past impacts, and better support managed fish stocks dependent upon these sites.

2.2.3 Minimizing the adverse effects of fishing on EFH –Alternative 6

Alternative 6. Establish minor modifications to fishing gears and a gear closures on sensitive habitat to prevent, mitigate, or minimize adverse fishing impacts in the EEZ with the following action items:

6. Regulate fishing weights on vertical line fishing gear used over coral reefs in HAPCs
7. Prohibit bottom anchoring over coral reefs in HAPCs
8. Prohibit use of bottom longlines, buoy gear, and all traps/pots on coral reefs
9. Prohibit the use of trawling gear on coral reefs
10. Require a weak link in the tickler chain of bottom trawls on all habitats

Action	Coral	Hard bottom	SAV	Sand/soft sediments
Regulate fishing weights on vertical line fishing gear used over coral reefs in HAPCs	✓			
Prohibit bottom anchoring over coral reefs in HAPCs	✓			
Prohibit use of all bottom longline, buoy gear, and all traps/pots on coral reefs	✓			
Prohibit the use of trawling gear on coral reefs	✓			
Require a weak link in the tickler chain of bottom trawls on all habitats	✓	✓	✓	✓

Action creating a closure	Gear Closure	Area Closure
Prohibit bottom anchoring over coral reefs in HAPCs	✓	
Prohibit use of all trawling gear, bottom longline, buoy gear, and all traps/pots on coral reefs.		✓

Prohibition of bottom trawling over all coral reefs should have significant positive impacts on the small coral areas that are not currently protected through other fishery management protections. However, since *most* areas of coral habitat are already protected from trawling activities, the overall improvement for coral habitat in the Gulf of Mexico would be minimal. Some deepwater areas of coral that are just being identified, such as Pulley Ridge on the southern edge of the West Florida Shelf (Section 3.2.2.2.1), could benefit from such prohibition in the future.

Prohibiting use of all traps, pots, bottom longlines, and buoy gear on coral reefs will have positive impacts on all coral reef habitat. The environmental benefits are described in Section 4.3.2.4, however, it is not possible to quantify all the potential benefits. Coral reef habitat in the EEZ occurs in areas already closed to pots, traps, and longline-buoy gear. However, some coral areas occur outside the closed areas in the vicinity of the Tortugas (which represent about 1,295

State of Louisiana



M.J. "MIKE" FOSTER, JR.
GOVERNOR

JACK C. CALDWELL
SECRETARY

DEPARTMENT OF NATURAL RESOURCES

December 1, 2003

Roy E. Crabtree, Ph. D.
Regional Administrator
National Marine Fisheries Service
9721 Executive Center Drive North
St. Petersburg, Florida 33702

12/9/03
Dave, DO YOU WANT YOUR OWN COPY?

RA	DRA	NEPA	DK
Public Affairs	SRA	SDRA	
Copy	FISER2	FISERX1	
Orig	FISER3	FISERX2	
Route	FISER4	FISERX3	
	Budget	Comp Ops	
Action	FYI	Date	12/1/03
Return to			

RE: **C20030482**, Solicitation of Views
NOAA Fisheries
Direct Federal Action
Draft Environmental Impact Statement (DEIS) for the Generic Essential Fish Habitat
Amendment to the Seven Fishery Management Plans for the Gulf of Mexico (GOM)

Dear Dr. Crabtree:

We have received and reviewed the above referenced DEIS on the Generic Essential Fish Habitat Amendment for the GOM, and offer the following preliminary comments for your consideration. However, a final Consistency Concurrence by this Office must await NOAA Fisheries submitting a Consistency Determination for the proposed Direct Federal Action.

LADNR1

In general, we find the DEIS to be well written and comprehensive on nearly all Fishery Management Plan aspects of concern to this Office. We commend NOAA Fisheries in developing, describing and evaluating each of 35 alternatives in accordance with the stated three-part purpose of the proposed action, namely, to (1) describe and identify Essential Fish Habitat (EFH) for the fishery, (2) identify other actions to encourage the conservation and enhancement of such fishery, and (3) identify measures to prevent, mitigate or minimize to the extent practicable the adverse effects of fishing on such EFH.

LADNR2

At the outset, it must be stated that the comments offered below apply mainly to the Central GOM proximal to the State of Louisiana and not to more distant areas of the Gulf adjacent to Florida and Central and West Texas. We make mention this geographic distinction because our regulatory concern is for those fishery resources that are more directly involved in the commerce and recreational interests of this State. Thus, for example, we wholeheartedly support the proposed Habitat Areas of Particular Concern (HAPC) status recommended for the Flower Gardens under Alternative 9, which lie in the

Dr. Roy E. Crabtree, Ph. D.

December 1, 2003

Page 2

LADNR2 Central Gulf, but do not wish to comment on the other proposed HAPC sites, which are located in the Eastern GOM.

LADNR3 We agree with NOAA that Concept 6 is the most applicable and preferable of the six Concepts delineated in the DEIS for characterization of EFH for six of the seven Fishery Management Plans (FMP) because this Concept is based not only on areas of higher species density and the NOAA Atlas, but also on functional relationships analysis, and is thus more ecosystem oriented and niche descriptive than the other Concepts presented in the DEIS. For the Coral FMP, Alternative 4, which is based on the known distribution of Fishery Management Units (FMU), appears to be most appropriate because this Concept considers the total distribution of coral species and life stages throughout the Gulf of Mexico, including the East and West Flower Banks, other coral areas, as well as hard bottoms scattered along the pinnacles from Texas to Mississippi at the Outer Continental Shelf edge. Also, the NOAA Atlas does not contain distribution information for coral as it does for the other six FMP's.

The final suite of Alternatives developed by NOAA deal with preventing, mitigating or minimizing adverse effects of fishing on EFH Alternatives. Of these, NOAA's Preferred Alternative 6 would give greater protection to coral reefs by restricting fishing gear use over coral reefs (four Measures) and would require use of a weak link in the tickler chain of bottom trawls on all habitats in the GOM (Measure 5). In view of the widely accepted sensitive nature of the East and West Garden Bank Islands, and the rarity of this habitat in the GOM, the four restrictive fish gear Measures appear well substantiated and applicable to these unique coral areas.

LADNR4 The effectiveness of Measure 5 would depend on the breaking threshold of the weak link in tickler chains. Certainly, a weak link would help minimize bottom habitat degradation, but could also be costly to the trawling fleet where the weak link breaks unnecessarily, resulting in the loss of catch associated with tows. Thus, NOAA should carefully define the cost and benefits of this Measure at different thresholds of breaking prior to implementation of this Measure in FMP's of the GOM. While we agree with NOAA that this Measure will directly benefit managed fish and may result in higher productivity if this Measure limits bottom habitat degradation, it needs to be balanced against the adverse effects on costs to the fishing industry.

LADNR5 On Page 4-37, it is stated that Alternative 6 "would eliminate most harvest of non-federally managed species for the EEZ, and would eliminate most habitat damage occurring due to fishing gears" and goes on to say that this Alternative "would almost certainly shift a large amount of fishing effort to state waters." This paragraph needs further explanation/elaboration to provide context for the statements, and expansion and quantification of impacts expected on fishery resources and the environmental and commercial consequences of shifts of fishing efforts to state waters.

Finally, we would like to thank NOAA Fisheries for the opportunity to review the DEIS on this Generic

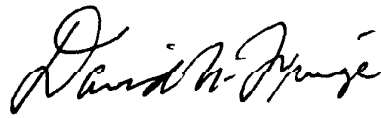
Dr. Roy E. Crabtree, Ph. D.

December 1, 2003

Page 3

Essential Fish Habitat Amendment to the FMP's for the GOM, and look forward to working with your agency in developing Essential Fish Habitat regulations for this most important Gulf resource. If you have any questions concerning this determination please contact Brian Marcks, of the Consistency Section at (225) 342-7939 or 1-800-267-4019.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Frugé". The signature is fluid and cursive, with the first name "David" being the most prominent.

David W. Frugé
Administrator

DWF/JH/bgm

cc: Joyce Wood, NOAA, Silver Spring, Md.
Heather Finley, LDWF

December 1, 2003

GULF RESTORATION NETWORK

338 Baronne St., Suite 200
New Orleans, LA 70112

THE OCEAN CONSERVANCY

449 Central Avenue, Suite 200
St. Petersburg, FL 33701

REEFKEEPER INTERNATIONAL

2809 Bird Avenue
Miami, FL 33133

OCEANA

2501 M Street, NW, Suite 300
Washington, D.C. 20037-1311

December 1, 2003

Dr. Roy Crabtree, Administrator
National Marine Fisheries Service-SERO
9721 Executive Center Drive, N.
St. Petersburg, FL 33702

RA _____	DRA _____	NEPA _____
Public Affairs _____	SRA _____	SDRA _____
Copy _____	FISER2 _____	PA FISERX1 _____
Orig _____	FISER3 _____	FISERX2 _____
Route _____	FISER4 _____	FISERX3 _____
Action _____	FVI _____	DATE _____
Return to _____	Comp. Co. _____	Date _____

**RE: Comments on the Draft Environmental Impact
Statement for the Generic Essential Fish Habitat Amendment for the
Gulf of Mexico**

Dear Dr. Crabtree,

The Gulf Restoration Network,¹ Reefkeeper International,² The Ocean
Conservancy,³ and Oceana⁴ are writing to offer additional comments on the
suitability of the Draft Essential Fish Habitat Environmental Impact Statement

¹ The GRN is a network of forty-seven groups and individuals dedicated to protecting and preserving the valuable resources of the Gulf of Mexico. We have members in all five Gulf states.

² ReefKeeper International is a public interest conservation organization exclusively dedicated to the protection of coral reefs and the sustainability of their marine life.

³ The Ocean Conservancy is a national non-profit organization with over 900,000 members and volunteers that are committed to protecting the global abundance and diversity of ocean wildlife. Through science-based advocacy, research and public education, The Ocean Conservancy informs, inspires and empowers people to speak and act on behalf of wild healthy oceans.

⁴ Oceana is a non-profit international advocacy organization dedicated to restoring and protecting the world's oceans through policy advocacy, science, law and public education. Founded in 2001, Oceana's constituency includes members and activists from more than 150 countries and territories who are committed to saving the world's marine environment. In 2002, the American Oceans Campaign became part of Oceana's international effort to protect ocean eco-systems and sustain the circle of life.

(DEIS) for the Gulf Mexico, first noticed for public comment on August 29, 2003.⁵ Our groups have closely followed the development of this programmatic document and have collectively and individually provided written and oral comments throughout its development. Our letter of August 27, 2003 reiterated our main concerns, detailed our previous involvement in the process and included copies of some previous written comments submitted to the Gulf Council. While we respect the amount of work that has been dedicated to compiling information on essential fish habitat for a region as large and diverse as the Gulf of Mexico, the document in its current form will not properly serve its purpose, and does not comply with the requirements of the National Environmental Policy Act (NEPA). We offer the following comments to particularize the problems still inherent in the DEIS and discuss why the National Marine Fisheries Service (NMFS) should effect the needed changes.

Overview and Background

Understanding the problems with this potentially valuable document requires understanding the background that led to its production. NMFS originally produced only a skeletal environmental assessment to support its designation of essential fish habitat in the Gulf. In the lawsuit challenging NMFS' NEPA compliance, the court found that this EA, along with those for the other regions, violated NEPA in several ways. One is particularly important for understanding the problems with the current draft EIS:

⁵ 68 Fed. Reg. 52,018.

None [of the regions] included the relevant information required by 40 C.F.R. §1508.9 in the EAs: there is simply not enough evidence or analysis in any EA to determine whether an EIS is necessary; all the EAs are couched in very general and vague terms, and spend more time *describing* the proposed alternative and the requirements of NEPA than they do actually *analyzing* the proposed alternative and complying with the requirements of NEPA.

In other words, the judge found that the NEPA document long on rhetoric and short on facts and analysis.

I. NMFS inappropriately ceded its EIS oversight responsibility to the Gulf Council.

After remand NMFS determined that it would delegate the preparation of the draft EIS to the Gulf of Mexico Fisheries Management Council. This was in itself an unusual decision, since NEPA directs that environmental impact statements be prepared by or under the direct supervision of the action agency itself.⁶ This regulation goes on to state that the contractor be chosen solely by the lead agency so as to avoid any conflict of interest. Furthermore, “contractors shall execute a disclosure statement prepared by the lead agency, specifying that they have no financial or other interest in the outcome of the project.”⁷

In this case NMFS delegated contractor selection to the Gulf Council, as well as delegating oversight of the contractor and all decision-making concerning the DEIS itself. While it is not uncommon to have a contractor prepare an EIS, or to have the EIS prepared with the collaboration of a third party such as a permit applicant, the NEPA regulations clearly require that an action agency such as NMFS retain active control over the process and all aspects of preparation of the

⁶ 40 C.F.R. 1506.5(c) (EIS “shall be prepared directly by or by a contractor selected by the lead agency.”).

⁷ 40 C.F.R. 1506.5(c).

GRN1

GRN1

document. Under NEPA, the lead agency must also oversee and independently evaluate the preparation of an environmental impact statement by a third party contractor.⁸ “If the document is prepared by contract, the responsible federal official shall furnish guidance and participate in the preparation and shall independently evaluate the statement prior to its approval and take responsibility for its scope and contents.”⁹ In addition, NMFS agreed to prepare the EIS in the settlement agreement resolving the appeal of the case.¹⁰

So in other words, if the EIS is prepared by an outside consultant, the lead federal agency must furnish guidance, participate in its preparation, and independently evaluate the EIS.¹¹ In order to independently evaluate, the lead agency must do more than provide a mere formal review of the EIS.¹² For example, in *Sierra Club v. Marsh*, the lead agency (1) met with the outside consultant to discuss EIS preparation and permitting procedures, (2) participated in the scoping procedure, (3) discussed the draft outline, (4) worked with contractor personnel throughout the process to monitor the EIS progress and to provide input, (5) and had its own specialists review both the DEIS and FEIS to insure compliance with applicable laws.¹³ In this case, however, NOAA Fisheries ceded full authority for the preparation of the draft to the Council, without retaining significant oversight or involvement.

GRN1

⁸ 40 C.F.R. 1506.5(c).

⁹ 40 C.F.R. § 1506.5(c).

¹⁰ See Joint Stipulation and [Proposed] Order, *American Oceans Campaign v. Evans*, Civ. No. 99-982, filed Dec. 17, 2001, at ¶ 3 (“Federal defendants, acting through the National Marine Fisheries Service (NMFS), will prepare EISs for all of the fisheries that were challenged in this lawsuit.”); ¶ 9 (“NMFS will prepare the EISs pursuant to this Joint Stipulation and Order in accordance with the schedule attached hereto. . .”).

¹¹ *Sierra Club v. Marsh*, 714 F. Supp. 539, 552 (D. Maine 1989).

¹² *Fayetteville Area Chamber of Commerce v. Volpe*, 515 F.2d. 1021, 1025 (4th Cir. date?).

¹³ 714 F. Supp. at 556.

By law, 11 of the 17 voting members of the Gulf Council must have a fishing background (occupational or otherwise) and can only be recommended after consultation with “representatives of the commercial and recreational fishing interests of the State.”¹⁴ As a result and because the Act requires that the list of candidates for council membership be generated by the governors of each of the states in the region, the process of appointing these council members is inherently political in nature. In the Gulf of Mexico this has created a council with a voting membership that includes heavy representation from some sectors of the recreational fishing community, a much smaller representation of commercial fishing interests, one mariculture representative and a single conservation/science/academic representative. Such a body is by nature one with personal financial interests in the matters at hand, which increases the possibility of the kinds of conflicts NEPA seeks to avoid through requiring selection of contractors without conflicts of interest, and oversight by the action agency.

The process of preparing this DEIS reflected the political nature of the Gulf Council. This is not intended to denigrate the Council’s integrity, but simply to recognize the reality that the Council acts as a political body, and this reality affected its decision-making in the NEPA process on EFH. The Gulf Council operates via committee recommendations, with final decisions made by majority vote of the full council. This is very different from the kind of oversight a lead agency would provide in supervising a contractor. It is true that NMFS provided personnel to participate in the Council’s EFH EIS meetings NMFS is only one of

¹⁴ 16 U.S.C. 1852(b)(2)(A), (C).

the 17 voting members of the Council, however, and the Council was not bound by any of the recommendations made by NMFS, and had full authority to vote on issues of scope, data sets, the range of alternatives, and the choice of preferred alternatives. At the end of the Council process, NMFS immediately promulgated the document supplied by the Council without making any alterations.

Furthermore, NMFS regional office has had the opportunity to witness first-hand the Council decisions that appeared to be influenced primarily by maneuvering among members to minimize impacts to their particular interests. And should NMFS have missed this, we and probably other groups have provided comment decrying what has become a regular pattern at the Council: choosing parameters that yield the outcome of least impact to the dominant interests on the Council.¹⁵

GRN2

The end result of this process is a DEIS that still retains many of the flaws the District of Columbia court found with the original EA. There is a great deal of useful, substantive information in the DEIS concerning fish habitat and the human and other environmental factors affecting it, along with detailed maps and charts. There is very little analysis, however, which ties this information to the alternatives selected for analysis. The result is a DEIS which is long on provision of information concerning the affected environment, but again short on actually applying that information to the selection and analysis of alternatives for action. The result is a document that does not contain the breadth of alternatives or the analysis required to comply with NEPA.

¹⁵ See, e.g. letter from GRN to NOAA Fisheriesre: King mackerel.

We believe the paucity of reasonable alternatives can be directly tied to the delegation of supervision of the process to the Gulf Council, and the Council's political rather than scientific decision-making process. This EIS is intended to address three areas: (1) designation of essential fish habitat; (2) minimization of adverse impacts of fishing on EFH; and (3) designation of Habitat Areas of Particular Concern ("HAPCs"). In the latter two of these areas, as explained below, the DEIS addresses only a narrow range of alternatives, despite the fact that there are other reasonable alternatives that are much more closely aligned with NMFS' policy objectives under the Sustainable Fisheries Act.

This document has cost a great deal in time and money and contains some useful information. It will not be revisited anytime soon, and it will be a template for Council and NMFS actions for years to come. It cannot serve this purpose effectively in its present truncated form. We believe that NMFS must revisit the scope of the alternatives considered in the sections on minimization of adverse impacts of fishing and designation of HAPCs.

The resulting loss of analytical integrity can be found throughout the draft EFH EIS. For example:

GRN3

1. The framework for developing fishing impact minimizing alternatives is not followed. The contractor provided five concepts in Section 2.5.1 that were to guide the development of alternatives to minimize fishing impacts: (1) No Action, (2) Alter gear to reduce impacts, (3) Restrict use of gear in affected area, (4) Reduce fishing effort, and (5) Prohibit gear in affected habitat. In terms of prohibiting gear the alternatives provided are limited to only a small range of habitats affected by fishing gear: trawling on coral (Alternative 2), use of anchors, traps/pots, bottom longlines and buoy gear on coral (Alternative 4), and use of tickler chains on hard bottom, SAV, sand/shell and soft

- GRN3 | sediments (Alternative 4).¹⁶ None of the bundles of alternatives analyzed, however, call for prohibiting bottom longlines or traps over hardbottom. This despite the recognition that the “relative impacts of bottom longlines and all traps, outside closed areas, is greatest on this [hardbottom] habitat.”¹⁷ Similar lack of protection for SAV occurs, despite its designation as affected habitat for a number of gear types.¹⁸
- GRN4 | 2. The framework for minimizing impacts in a situation of limited information is not followed. Despite the fact that the DEIS concludes that preventative/corrective as well as precautionary approaches are warranted in developing management measures to minimize fishing impacts on EFH,¹⁹ the use of “MPAs,” suggested in this approach are not developed into alternatives.²⁰
- GRN5 | 3. The impacts identified in the table “Implications of fishing impacts alternatives” table (Impacts Table, page 2-117) are not reflected in the alternatives to minimize impacts. The contractor identifies the various habitat types (for example, coral, hardbottom, and submerged aquatic vegetation, or SAV) and on the other axis lists a series of actions to lessen impacts. Check marks on the table indicated when a particular action is deemed appropriate for a type of habitat. For live/hardbottom the Impacts Table indicates that eliminating bottom longlining would reduce harm to that environment. This table was the reference point for decisions about the bundles of alternatives being considered for inclusion. Inexplicably, none of the alternatives presented include limitations on bottom longlining on any habitat but coral. The draft EFH EIS contains no analysis of the benefits of protecting SAV from such fishing effects and no discussion of why this potential harm to SAV is identified and then dropped from document.
- GRN6 | **II. The range of alternatives for minimizing fishing impacts provided in the draft EFH-EIS are impermissibly narrow, and will not protect important fish habitat in the Gulf of Mexico.**
- GRN7 | **A. Insufficient protection for most habitat types.**
- GRN7 | The contractor provided five concepts in Section 2.5.1 that were to guide the development of alternatives to minimize fishing impacts: (1) No Action, (2) Alter gear to reduce impacts, (3) Restrict use of gear in affected area, (4) Reduce

¹⁶ Draft EFH EIS, pp. 2-121-2-129.

¹⁷ DEIS, p. 2-121.

¹⁸ DEIS, p. 2-117 – 2-129.

¹⁹ DEIS, p. 2-79.

²⁰ See discussion below, p 11.

GRN7

fishing effort, and (5) Prohibit gear in affected habitat. These concepts are reasonable, and if carried out in the selection of alternatives and analysis would provide sound guidance for future decision-making. Unfortunately, however, concepts 4 and 5 are ignored with respect to most habitat types. Alternatives that are consistent with the objectives of the Sustainable Fisheries Act (SFA) – indeed, more consistent with the objectives of the SFA than the preferred alternative - were discarded with limited or no discussion.

The discussion of alternatives is the heart of the NEPA document and is the basis for insuring that a “hard look” at environmental consequences is taken, and as a consequence the choice of alternatives to be examined is critical. 40 C.F.R. § 1502.14 gives the requirements for discussion of alternatives, and requires that agencies:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Include appropriate mitigation measures not already included in the proposed action or alternatives.

40 C.F.R. § 1502.14.

GRN7

The action agency is required to consider alternatives that are feasible²¹. What is reasonable or feasible is determined by reference to the *purpose* of the proposed action and the agency's policy objectives.²² Here, the purpose of the action and the policy of the SFA seem to have been completely ignored in the formulation of alternatives.

Providing information to carry out minimization of impacts of fishing on EFH is one of the three stated purposes of this EIS process. The final rule for EFH, published on January 12, 2002, provides guidance on the required EFH provisions of the SFA of 1996. A key provision of the SFA is the requirement to minimize, to the extent practicable, the adverse impact of fishing on EFH.²³

Adverse impact, as defined in the EFH final rule, means:

any impact that reduces 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, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions²⁴.

It is important that the EFH final rule specifically embraces ecosystem management and the need to make risk averse decisions regarding EFH. *Id.* at 2349. This directly follows from the overall approach of the SFA, which is

²¹ *Muckleshoot Indian Tribe v. United States Forest Serv.*, 177 F.3d 800, 814 (9th Cir.1999) (quoting *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 551, 98 S.Ct. 1197, 55 L.Ed.2d 460 (1978)).

²² *National Wildlife Federation v. National Marine Fisheries Service*, 235 F. Supp. 2d 1143 (W.D. Wash. 2002); *Citizens Against Burlington v. Busey*, 938 F.2d 190, 195- 96 (D.C.Cir.1991).
²³ 16 U.S.C. 1853(a)(7).

²⁴ 67 Fed. Reg. 2376 (January 17, 2002).

specifically intended to implement a precautionary approach to fisheries management. As NMFS itself has put it: "Care should be exercised in the face of inadequate information or overfished stocks to guard against habitat losses or alterations that may prove significant to the long-term productivity of the species."

B. Failure to incorporate the management measure required under the precautionary and preventative approaches.

GRN8 The need to incorporate a precautionary approach is also specifically recognized in the DEIS itself. Given the level of uncertainty associated with impacts of fishing on EFH, the DEIS notes that a mix of preventive and precautionary measures is required.²⁵ Unfortunately, this is the last mention of the preventive or precautionary approaches in the document. The formulation of alternatives for minimizing impacts of fishing does not mention such policy objectives or the purpose of the SFA at all.

GRN9 The DEIS also recognizes at several points that "marine protected areas," and effort reduction are some of the tools appropriate for minimizing the adverse impacts of fishing on EFH.²⁶ The need to use these approaches follows directly from the recognition that information on habitat impacts is not perfect, and a mixture of preventive and precautionary approaches is required. Time/area closures and reduction of effort are likewise recognized in the EFH regulations themselves as one possible means of effecting minimization of impacts to habitat

²⁵ DEIS pp. 2-77 to 2-79.

²⁶ E.g., DEIS at 2-58. The term "marine protected area" or MPA includes management measures to protect a specific area. These measures can include area closures and area restrictions such as no motor zones, no anchor zones, no-take areas, gear restrictions, etc.

of fishing.²⁷ Inexplicably, however, for all habitat types except coral these methods are not included in the alternatives discussed in the DEIS.

GRN9

The information to formulate these alternatives is available in the DEIS. The appendices and the text contain the information necessary to designate specific habitat types that are vulnerable to impacts by particular gears. For example, the maps at pages 9-101 of the Appendix delineate particular areas that are vulnerable to the impacts of particular gears, and even include Figure 3.5.16a, a map showing the habitat sensitivity to all fishing gears combined. Other tables show the occurrence of particular habitats that are known to have adverse impacts from fishing practices.

What is notably absent – and this is the key omission for purposes of compliance with NEPA - is the use of this kind of information like the above to formulate a reasonable range of alternatives. With the exception of corals, area closures and effort reduction are barely mentioned.

GRN10

The treatment of shrimp otter trawls is a useful example. Table 3.5.1 in the Appendices lists, among others, submerged aquatic vegetation (“SAV”) and hard bottom as moderately affected by this gear. The moderate impacts listed for this gear on these habitats fall well above the threshold of significance for adverse impacts identified in the statute and the final rule for EFH. Moderate impacts are defined in the DEIS as “Capable of severe damage to habitat in a “footprint” of the gear during a single encounter, or capable of moderate damage to habitat over

²⁷ 50 C.F.R. § 600.815.

a swath. Impairs the function (for fish) of the habitat.”²⁸ By contrast, the definition of adverse effects requiring mitigation are those that are “more than minimal and not temporary in nature.”²⁹ Further, there is no indication at any point in the DEIS that analysis of fishing effort brings these effects to a level that is minimal and temporary in nature.

GRN10 Despite this, a full range of possible mitigation measures for these adverse impacts is never considered. For SAV, for example, the various measures included in the alternatives for the trawl fishery are limiting boat size, making changes to the use of tickler chains on trawls, requiring aluminum doors, and limiting net size.³⁰ There is no discussion of how these alternatives are derived from or related to the impacts of trawls on SAV.³¹ There is no consideration or discussion of a prohibition on the use of trawls only on SAV, or specific areas of SAV. The only area closure that is even considered for SAV is Alternative 5, which is a *complete* prohibition on the use of *all* kinds of fishing gear in *all* types of habitats Gulf-wide.

Likewise, there is no discussion of closures for sand, soft bottom, hard bottom other than corals, or other types of habitat. This is despite the fact that such an alternative is feasible and can be readily constructed with the information already in the DEIS.

Numerous other adverse habitat/gear interactions could be addressed through the use of area closures or area restrictions. In fact, the table on 2-117 to

²⁸ DEIS at 2-39.

²⁹ 50 C.F.R. § 600.815(a)(2).

³⁰ DEIS pp. 2-117 through 2-119.

³¹ Section 3.5.2.1.1 of the DEIS specifically states that trawl gear can impact the bottom through tickler chains, doors, footropes, rollers or the belly of the net.

GRN10 2-119 of the DEIS indicates that there will be an alternative prohibiting traps, longlines, etc. on hard bottom, but this indication is not carried through into the discussion of the alternatives.³² Numerous other types of area closures, including for the protection of grouper spawning sites through preventing fishing during the spawning season are both feasible and consistent with NMFS' responsibilities under the SFA, and they must be considered in this document.

The importance of considering area closures and area restrictions as a means of mitigating impacts to EFH is underscored by the fact that several recent studies have found that these tools can make a significant contribution to long-term strengthening of fish stocks. Thus, the benefits of protecting areas could well be found to outweigh any short-term economic considerations.

C. Lack of meaningful effort reduction alternatives.

GRN11 There is also no discussion of effort reduction other than perhaps through the indirect measures of limiting vessel length or number of sets by longliners in a day. In fact, it is not clear whether such measures would actually limit effort. More straightforward measures such as IFQs must be discussed. As an example, NMFS has estimated that effort in the shrimp fishery could be cut by a substantial amount without a significant drop in catch. Reducing the amount of trawling required for harvest is one reasonable means of lessening adverse impacts to habitat. Again, there is no analysis or reasoning given for limiting the alternatives to the frankly rather marginal items included in the alternatives.

³²See discussion above, p. 7.

Overall, the alternatives for minimizing the adverse impacts of fishing on habitat are extraordinarily narrow, and must be broadened in order to pass legal muster. At a minimum the document must contain discussion of reasonable area closures and area restrictions to protect specific habitat types from specific types of gear. Again, the information to determine a feasible set of such areas is already available in the document. The Appendices already contain information on habitat occurrence, rarity, fishing effort and fishing impacts that can be combined to create feasible, defensible alternatives. Such alternatives are clearly necessary to give the decision-makers – NMFS, the Gulf Council, Congress and the public – the information needed to make reasoned decisions on protection of EFH from adverse impacts of fishing.

GRN11

It is difficult to escape the conclusion that a review of alternatives for *minimizing impacts to non-coral habitat involving area closures or effort* reduction was not undertaken simply because it was too politically volatile. In this respect, the failure of analysis of alternatives seems to be another casualty of the process used by the Gulf Council to dictate the content of the DEIS. The Council actually requested that alternatives be developed based on restricting use of gear and reducing effort, but a reasonable range of alternatives for these concepts for habitat types other than coral were simply never included in the document. The user group panel assembled by the Council made this same request, but again it was simply never addressed.

D. Insufficient treatment of prey species

The DEIS also contains little information on the impact of removal of prey species as an impact on essential fish habitat. The final rule on EFH specifically states that:

Loss of prey species may be an adverse effect on EFH and managed species because the presence of prey makes waters and substrate function as feeding habitat, and the definition of EFH includes waters and substrate necessary to fish for feeding. Therefore, actions that reduce the availability of a major prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat that are known to cause a reduction in the population of the prey species, may be considered adverse impacts on EFH if such actions reduce the quality of EFH. FMPs should list the major prey species for the species in the fishery management unit and discuss the location of prey species' habitat. Adverse effects on prey species and their habitats may result from fishing and non-fishing activities.³³

GRN12

The DEIS nonetheless contains very little analysis of and no alternatives for dealing with removal of prey species as an adverse impact on EFH.

This subject was discussed during the preparation of the DEIS, but no significant analysis of the impact of removal of prey species either through directed fisheries or as bycatch is discussed.

E. Insufficient cumulative impacts analysis

Finally, the sections on minimizing adverse impacts to EFH from fishing contain very little consideration of cumulative impacts. The document states plainly that cumulative impacts of fishing gears were not considered, although the information was available to do so. Again, adequate alternatives, including area closures, could not be formulated without articulating and considering this

GRN13

³³ 67 Fed. Reg. 2378 (January 17, 2002).

GRN13

information. Likewise, non-fishing cumulative impacts are not considered. This is a problem for the entire document, but shows up especially in this section. Again, much of the information necessary to integrate consideration of cumulative impacts of non-fishing activities into the choice of alternatives and analysis is available in the document, but is simply not used.

GRN14

III. The HAPC alternatives offered in the EIS do not provide an adequate framework for identifying known and future areas that would require designation under the Final Rule.

A. The rejection of the spawning area alternative (Alternative 4) for HAPC designation is without sufficient basis, and results in a document that will provide no guidance for protecting spawning sites via EFH amendments to the Reef Fish FMP.

GRN15

The decision to remove Alternative 4 (spawning areas) from consideration in identifying HAPC is without sufficient basis and will severely limit the usefulness of this generic EFH EIS for protecting reef fish habitat necessary for a key life function: spawning. Alternative 4 identified as HAPC those areas used for spawning for certain species, primarily snappers and groupers, many of which species are considered depleted in the Gulf of Mexico.³⁴ There is ample information on locations of likely grouper spawning aggregation sites that were identified by the Gulf Council staff during the development of Amendment 18 to the Reef Fish Fishery Management Plan (see map, attached as Appendix A). In addition, the “considered but rejected” discussion of Alternative 4 specifically recognizes that areas so designated would meet criterion (a) of the Final Rule – “important ecological function.”³⁵ Nonetheless, and without sufficient basis, the

³⁴ Section 2.6.2.1, p. 2-131.

³⁵ DEIS page 2-131.

Gulf Council voted to reject Alternative 4, leaving the EFH EIS without a mechanism for identifying key spawning areas that are subject to fishing impacts in the Gulf of Mexico.

Neither of the two rationales provided for rejecting this alternative are sufficient to justify the removal of Alternative 4. The rationales identified for rejecting this alternative were (1) that it “focused on a single aspect of ecological importance” and (2) that the Council favored Alternative 8 “which utilized all 4 considerations listed in the Final Rule,” including consideration of ecological importance.

GRN15

Rejecting Alternative 4 because it addresses only one aspect of ecological importance is unreasonable and not supported by the Final Rule.

Regarding the first rationale, the Final Rule provides for HAPC designation based on any one of the four considerations and does not require that the consideration of ecological importance (one of the four) be based on more than one aspect, as long as that aspect is considered “important.”³⁶ The use of specific areas by groupers aggregating to spawn has already been recognized by the Gulf Council and NMFS as a stand-alone important ecological function in the Gulf of Mexico. Two marine reserves, Madison-Swanson and Steamboat Lumps, were established in large part to protect key male gag grouper during and after spawning off the coast of Florida. In addition, during the development of alternatives to protect groupers in Amendment 18 to the Reef Fish Fishery Management Plan a number of likely spawning aggregation sites for grouper were

³⁶ 50 CFR 600.815(a)(8)

identified based on best available science³⁷. Not only is it feasible to retain Alternative 4, protecting likely spawning sites relates directly to the definition of essential fish habitat (areas used for spawning, feeding, breeding and growth to maturity).

Rejecting Alternative 4 in favor of Alternative 8 does not provide for identification of known or likely spawning areas, as suggested by the rationale.

GRN15 In the second case, NOAA Fisheries' reliance on Alternative 8 (Habitat parcels that met one or more of the considerations set out in the EFH Final Rule) as an adequate substitution for Alternative 4 suggests that consideration of spawning habitats as areas of concern in their own right will not be ignored, but will be included in the multi-prong analysis presented in Alternative 8. Unfortunately, this is not the case.

Despite its title, Alternative 8 uses habitat-based metrics that drop spawning sites as a stand-alone feature out of the analysis.³⁸ While the four Final Rule considerations are said to form the basis of the analysis for Alternative 8, the resulting table on page 2-112 does not include many of the areas identified in Amendment 18 as likely spawning aggregation sites for groupers. The lack of inclusion of spawning areas in Alternative 8 appears to stem from the undue reliance placed on creating quantifiable measures of ecological importance, and from the structure of the decision tree for identifying HAPC. The ability to quantify aspects of ecological importance is not a requirement for HAPC designation, and not all ecological features are amenable to such quantification.

³⁷ See Appendix (X)

³⁸ Section 2.1.4.3.1, p. 2-47, Section 2.1.4.2.1, p. 2-35.

The “ecological importance” section of the EFH EIS (section 2.1.4.2.1, p. 2-35) provides the analytical approach taken to determine which areas will be identified as areas of sufficient ecological importance to merit HAPC designation:

- 1) habitats that support the ecological activities of a larger number of managed species life stages;
- 2) habitats that support important ecological functions of managed species (bottlenecks); and
- 3) habitats that support species that play an important role in the food web (e.g. forage species).

GRN15

Although Section 2.1.4.2.1 identifies three approaches, in the end the analysis relies only on the first, because “the first approach . . . readily lends itself to quantification.”³⁹ There simply is no federal requirement that factors must be quantifiable in order to serve as an indication of ecological importance sufficient to merit HAPC designation. In fact, as NMFS clarified in its response to comments on the final rule⁴⁰ the purpose of the four specified considerations is to provide “sufficient basis for distinguishing a subset of EFH from the remainder of EFH.” Certainly if there are localized areas that best scientific information available indicates are likely spawning aggregations sites, the very nature of the use of the area distinguishes it from the rest of the habitat used by the fish in question.

These likely spawning sites are ecologically important, not only because groupers use them to spawn but also because groupers with site fidelity actually serve as ecosystem engineers as they use the areas. By moving sand off of hardbottom, groupers actually create habitat that is used by juvenile vermilion and

³⁹ DEIS, p. 2-35.

⁴⁰ Fed. Reg. January 17, 2002

GRN15

red snapper, two fish that are currently depleted in the Gulf of Mexico. (Dr. Koenig, personal communication).

B. Important coral areas are not identified for HAPC designation

Several important coral bank areas identified in a federal collaborative effort are not identified in the DEIS as potential HAPCs. In 2002, in partnership with NOAA's Office of Ocean Exploration, the Minerals Management Service, and the U.S. Geologic Survey, the Flower Garden Banks National Marine Sanctuary began a project to identify and visit, using remotely operated vehicles several topographic features in the Northwestern Gulf of Mexico. The results to date indicate that several areas, called banks, contain coral features, and other diverse marine life. These include Sonnier, Alderdice, McGrail, Geyer, and Bright Banks.⁴¹ For details of two of these, McGrail Bank, and Bright Bank, see Appendix B. While these areas are afforded protection from oil and gas activities, they are not protected from impacts due to fishing activities, and merit evaluation in the DEIS.

GRN16

In addition, recent explorations in the Gulf of Mexico by Dr. Sulak with the U.S.G.S. have verified that deep Lophelia pertusa corals exist in reef formation at the slope of the continental shelf at about 400 meters. These filter-feeding "deep" corals are known to support as diverse an array of marine life as the shallow photosynthesizing reefs identified as HAPC in the DEIS. They are extremely slow-growing and any impacts due to fishing will have long-term negative effects on fish habitat. None of the alternatives for HAPC designation in

⁴¹ G.P. Schmahl, Sanctuary Manager, Flower Garden Banks National Marine Sanctuary, personal communication, October 10, 2003.

GRN16 | the DEIS provide for identification of these deep coral areas, particular not the
| chosen preferred alternative, Alternative 9, which identifies a finite list of areas.

C. Important SAV and marsh areas are not identified for HAPC designation

The User Review Panel, which met during the development of the DEIS to provide recommendations on the document voted to recommend adding all SAV as mapped in Figure 3.2.1 and marsh areas as HAPC.⁴² Despite the recognition that “entire fisheries may depend on production by seagrass habitats,”⁴³ none of the alternatives for HAPC designation analyzed in the DEIS, not even those “considered but rejected” adopted this approach.

GRN17 | In the Biological Environment section of the DEIS, (Section 3.2)
| seagrasses are identified as providing seasonal habitat for drums, snappers and
| grunts, and nursery habitat for gray and mutton snapper as well as gag grouper, a
| species identified as depleted by NMFS. In addition, the “large *Halophila*
| meadows off the west coast of Florida are in close association with productive
| live bottom habitats and may provide important foraging grounds for
| commercially and recreationally important fishes such as grunts, snappers,
| grouper and flatfish.”⁴⁴ The authors of the report, however, go on to acknowledge
| a lack of data describing the contributions of these meadows to Florida shelf
| fishery resources. It is just such a situation – where data are lacking, but the value
| of a resource is known – that calls for the precautionary approach. And according
| to the framework adopted in this DEIS, that approach includes consideration of

⁴² User Review Panel Minutes of its May 5-7, 2002 meeting in Tampa, Florida.

⁴³ DEIS, p. 3-21.

⁴⁴ DEIS, p. 3-23.

GRN17

the use of an area closure to protect such habitat. Similar arguments can be made for marshes, which are acknowledged in the DEIS as “among the most productive ecosystems in the world.”⁴⁵ Designating SAV and marsh areas as areas of particular concern is a first step toward implementing the needed approach to protecting these valuable habitats, but a step that was never taken.⁴⁶

GRN18

D. Regulations for areas identified as HAPCs are not discussed.

Merely calling an area an HAPC does not provide it protection – rather a range of management alternatives for HAPCs also needs to be developed. The introduction to section 2.1.4.1 recognizes that HAPCs should receive conservation priority,⁴⁷ however the analysis goes no further in presenting reasonable alternatives to be implemented to provide such protection to these important areas. While there are some mentions of various types of HAPCs, like a coral or hard bottom HAPC, the necessary next step for protection of these sites is noticeably absent. For example, if an area is labeled a coral HAPC, perhaps anchoring of fishing vessels could be prevented. Other alternatives might include a designation of the area as a no-motor zone, or various fishing gear limitations. None of this appears in the discussions.

Conclusion

We recognize the complexity of the task at hand – to create a single guidance document for the protection of essential fish habitat in the Gulf of

⁴⁵ DEIS, p. 3-26.

⁴⁶ Some might argue that Alternative 8 includes two seagrass areas, and specific marsh or mangrove areas as HAPC, and therefore these areas have been properly recognized. This is not sufficient. To serve properly as a guiding document, this generic EIS must allow for protection for seagrass areas that are still being mapped, and for estuary habitats that are rebuilt.


⁴⁷ DEIS p. 2-34.


Mexico that will guide amendments to seven fisheries management plans.

However, the EFH DEIS is an important tool for the future protection of Gulf of Mexico natural resources, and so we expect that the guiding principles of NEPA and the SFA will be reflected consistently throughout this DEIS. Unfortunately, they are not. Because of our continued interest in the health of the Gulf of Mexico and the fish it supports, our groups have followed the development of this EIS closely. Our misgivings about the document are significant and merit serious attention. In its current form, this DEIS will not properly serve its purpose, and does not comply with NEPA requirements.

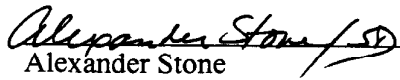
The areas of concern we have noted appear to stem, at least in part, from the manner in which the draft was developed, using the Gulf Council as primary oversight authority in working with the contractor. NMFS, however, now can make the necessary changes to this DEIS so that the alternatives for minimizing fishing impacts and designating HAPCs flow rationally from the analytical framework provided in the document and incorporate the wealth of information included therein. Using this approach, it should be feasible to greatly improve the treatment of prey species, cumulative impacts, and to fully incorporate consideration and use of area closures, area restrictions and other effort reduction management alternatives into this document.

We thank you for your serious consideration of these suggestions.

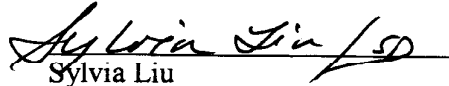

Sallie E. Davis
Director of Fisheries
Gulf Restoration Network


Marianne Cufone
Regional Fish Program Manager
The Ocean Conservancy

December 1, 2003



Alexander Stone
Executive Director
Reefkeeper International



Sylvia Liu
Senior Attorney
Oceana

Cc: William Hogarth
Christian M. Hoberg, EPA Region IV

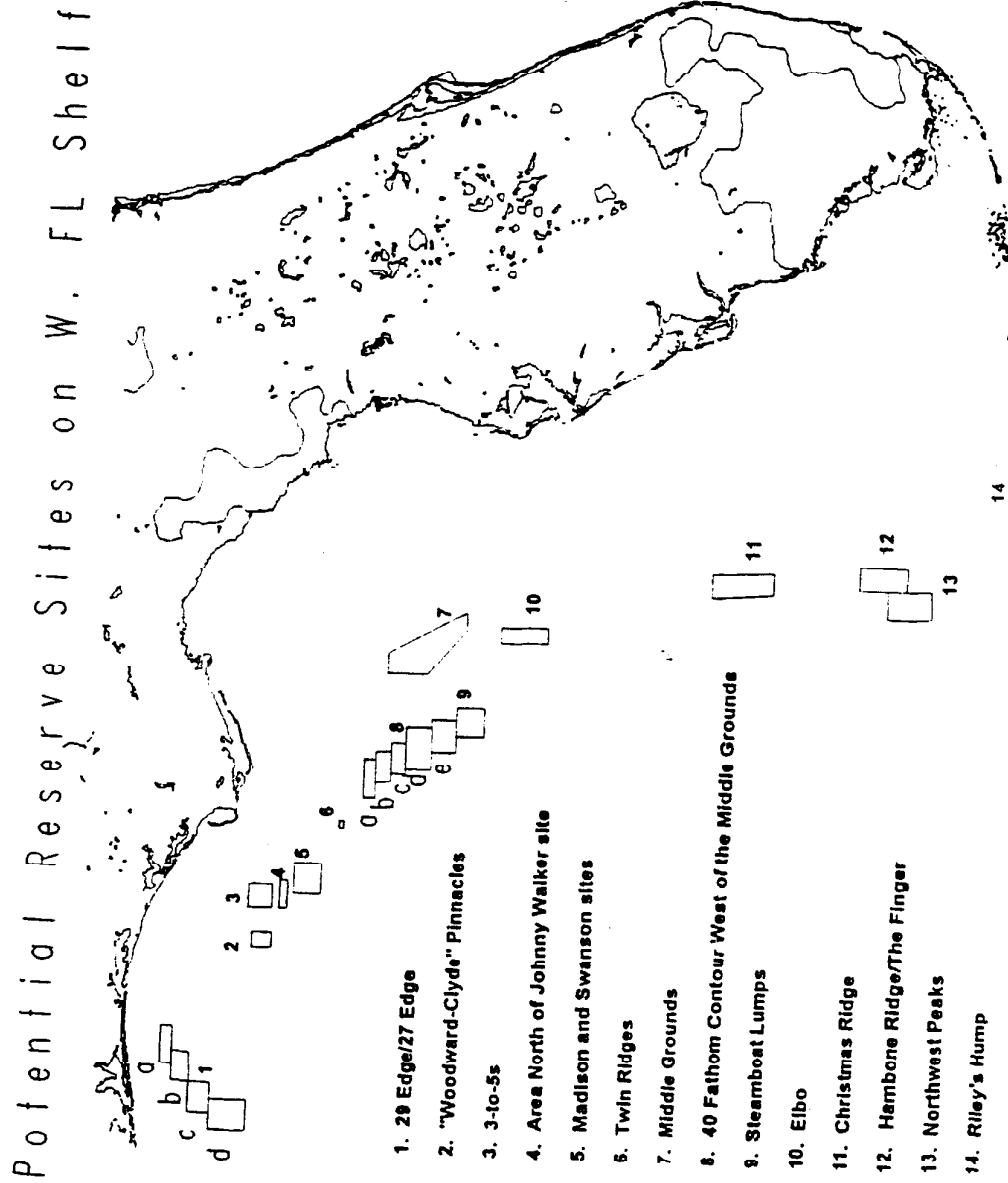


Figure 2. Potential reserve sites on west Florida shelf (source: Chris Koenig and Gary Fitzhugh)

More detailed descriptions like the two below of all of the areas shown on the map "Potential Reserve Sites on W. FL Shelf" can be found in the Appendix to Amendment 21 to the Reef Fish Fishery Management Plan.

Florida Middle Grounds (area 7) - 340 square nautical miles

This area was designated in 1982 in the Coral Reef Fishery Management Plan as a HAPC (habitat areas of particular concern). Its coordinates are therefore already fixed. Current restrictions apply to gear--no bottom longlines, traps, pots or bottom trawls. It is thought that many species of grouper and snapper spawn in this area. It has been suggested that this is an important spawning area for red grouper and for graysby (pers. comm. Chris Koenig).

40 Fathom Contour West of the Middle Grounds - denoted as **The Edges** by Moe 1963 (Area 8 - several sites within the same area) - total area = 436 sq. naut. mi.

Area A (61 sq. naut. mi),

Area B (67 sq. naut. mi),

Area C (57 sq. naut. mi),

Area D (143 sq. naut. mi),

Area E (108 sq. naut. mi)

Although this site is of low relief, Koenig directly observed a gag and scamp spawning aggregations with an ROV on a R/V Chapman survey in 1994. A Fishery Acoustic System (FAS) survey was conducted by NMFS Panama City and Pascagoula in 1996. This site is also listed in Moe's 1963 survey as an extensive linear area along the 40 fathom isobath scattered high relief rocky outcrops of limestone rock extending parallel to the coastline. At-sea fishing surveys also revealed this is currently an active region of commercial grouper fishing. These areas appear to harbor the densest number of gag aggregations, probably because of their proximity to one of the largest, most pristine seagrass habitats, to which their juveniles are tightly associated (pers. comm. Chris Koenig)

McGrail Bank

Northwestern Gulf of Mexico

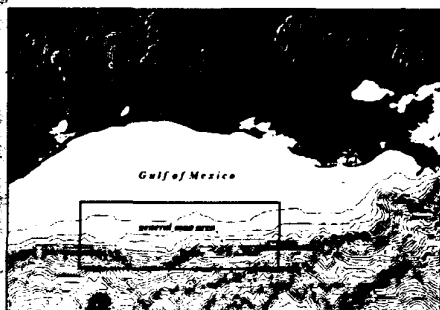


Figure 1. General location of areas mapped in the northwestern Gulf of Mexico.

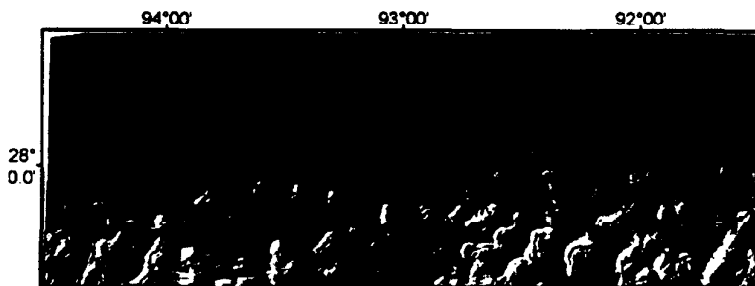


Figure 2. Location of individual areas mapped in 1990 (black outlines) and 2002 (red outlines). The underlying DEM is a shaded relief map from the NOAA Geologic Data Bank.

Background:

The outer edge of the continental shelf in the Northwestern Gulf of Mexico is scattered with topographic features, many of which arise as outward expressions of subterranean salt deposits. These features include the coral reefs of the Flower Garden Banks National Marine Sanctuary (FGBNMS), managed and protected by NOAA. The reefs and banks of the NW Gulf of Mexico were first explored using submersibles during the 1970's and 1980's, and have more recently been subjects of investigations using highly advanced technology. These early explorations produced data that has served as valuable baselines for the current studies.

In 2002, the FGBNMS partnered with NOAA's Office of Ocean Exploration, Minerals Management Service, and U.S. Geologic Survey and obtained high-resolution multibeam charts of twelve topographic features in the Northwestern Gulf of Mexico. The success of recent efforts to characterize and describe these habitats have been greatly enhanced by these charts - submersible dives are planned and tracked using these datasets, and post-processed imaging and data is subsequently georeferenced.

Over the past 5 years the FGBNMS has initiated and carried out 6 dedicated Remotely Operated Vehicle (ROV) cruises and 2 manned submersible cruises targeting the NW Gulf of Mexico topographic features. The purpose of this document is to highlight one of these features, McGrail Bank.

Nuyoo Deep Rover

Nuyoo Deep Rover 2000

Nuyoo Deep Rover 2000

Nuyoo Deep Rover 2000

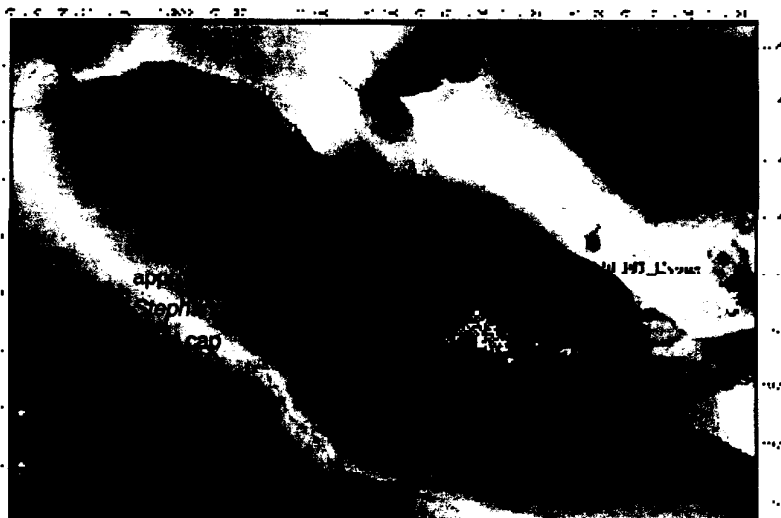
NATIONAL MARINE
SANCTUARIES

FLOWER
GARDEN BANKS



NOAA's National Ocean Service

Bathymetry courtesy of Jim Gardner, USGS Menlo Park, CA



SSR2002 NW Gulf McGrail Bank

0 500 1000 1500 2000 Meters



Image 1

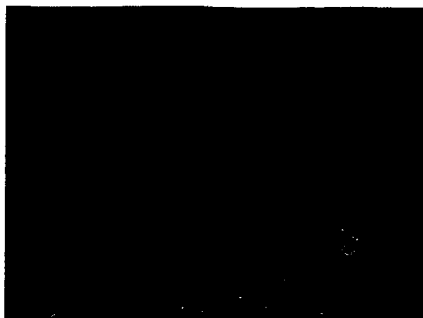


Image 2



Image 3

Observations:

McGrail Bank (formerly known as 18 Fathom Bank) was first described in a Northwestern Gulf of Mexico Topographic Features study (late 1970's/early 1980's) funded by U.S. Dept. of Interior's Bureau of Land Management and conducted by Texas A&M University.

This bank was selected as a target site for current investigations due to the reports of large *Stephanocoenia intercepta* heads. As a result of our investigations, we have determined that the coral cap of McGrail Bank is more extensive than first reported - upwards of an area of 0.25km². The coral cap (45m-60m depth) is dominated by 1.5m tall heads of *S. intercepta* (image 1&2), interspersed with large colonies of *Montastraea cavernosa* (image 5&6) and *Diploria strigosa* (image 4). Numerous colonies of *Agaricia* sp. (image 3) were also noted. According to observations made by submersible pilot, G.P. Schmahl (FGBNMS Sanctuary Manager), the coverage of the *S. intercepta* in some areas of the cap are up to 30%. For comparison, coral coverage at the FGBNMS reef cap is approximately 50%, and the Flower Keys reef tract averages around 6%, with areas reaching approximately 30% coverage.

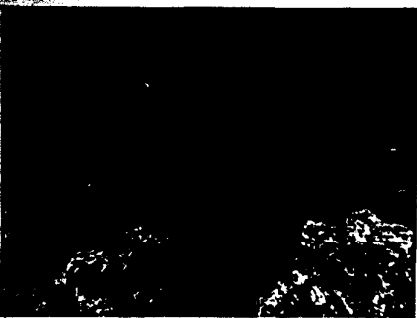


Image 4



Image 5

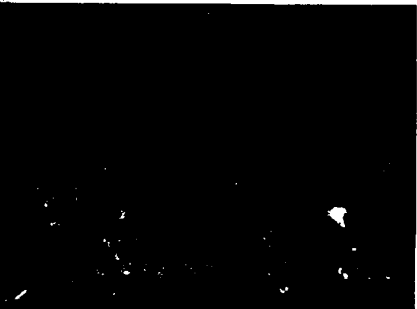


Image 6



Image 7

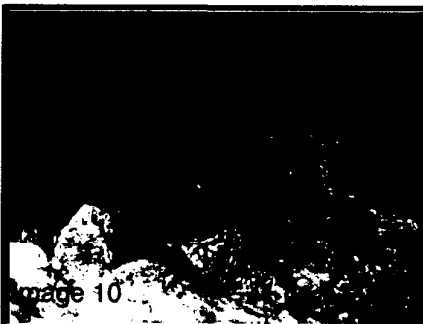


Image 10

The Caribbean wide dieoff of the long spined sea urchin, *Diadema antillarum*, is well documented. Their recovery is not. Several aggregations of *D. antillarum* (Image 10) were documented during investigations in 2002, along with associated juvenile marbled grouper (*Dermatolepis inermis*) - a pre-dieoff noted association.

McGrail Bank is afforded protection from oil and gas activities through Minerals Management regulations. This coral reef resource is not protected by any other means. Images 7-9 are examples of perturbations documented in 2002. FMI contact G.P. Schmahl - Flower Garden Banks National Marine Sanctuary - george.schmahl@noaa.gov 979-846-5942.



Image 8

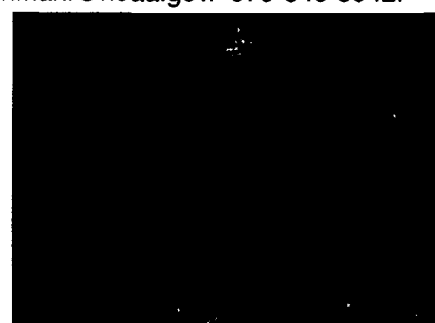


Image 9

Bright Bank

Northwestern Gulf of Mexico

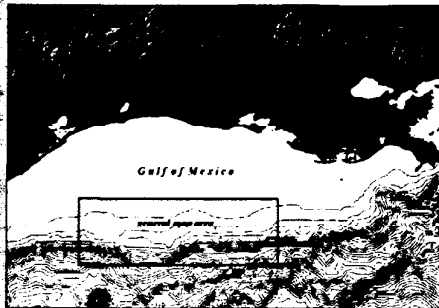


Figure 1. General location of areas mapped in the northwestern Gulf of Mexico.

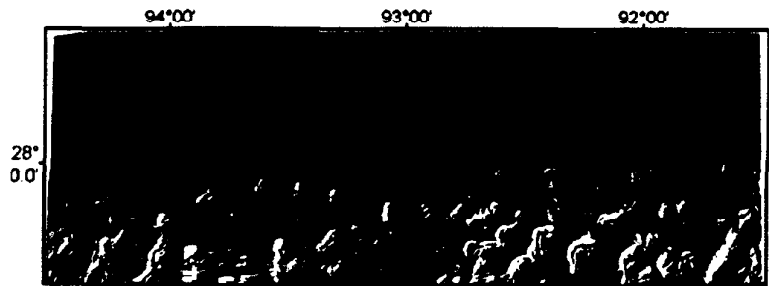


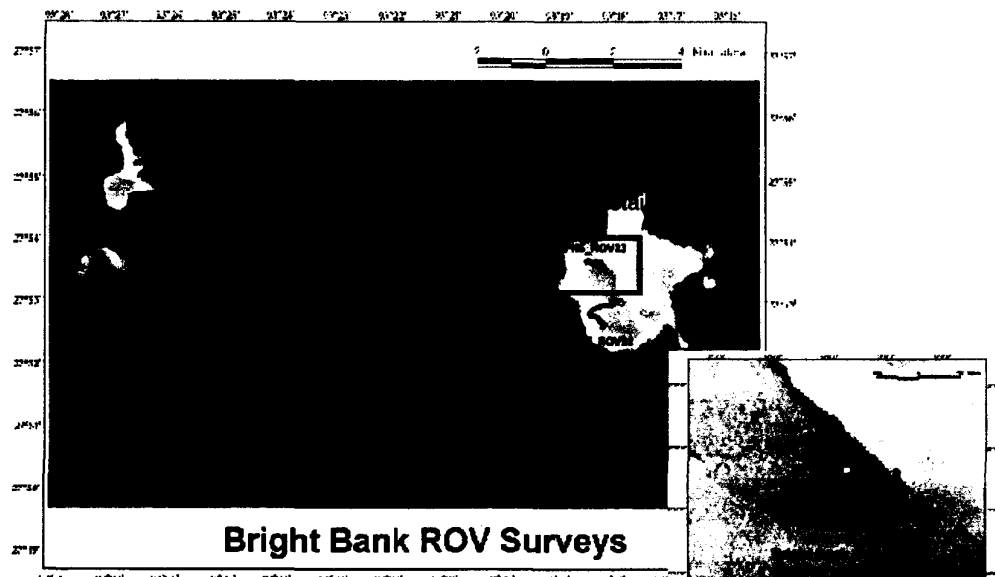
Figure 2. Location of meridional areas mapped in 1999 (black outlines) and 2002 (red outlines). The underlying DEM is a shaded relief map from the NOAA Coastal Dataset.

Background:

The outer edge of the continental shelf in the Northwestern Gulf of Mexico is scattered with topographic features, many of which arise as outward expressions of subterranean salt deposits. These features include the coral reefs of the Flower Garden Banks National Marine Sanctuary (FGBNMS), managed and protected by NOAA. The reefs and banks of the NW Gulf of Mexico were first explored using submersibles during the 1970's and 1980's, and have more recently been subjects of investigations using highly advanced technology. These early explorations produced data that has served as valuable baselines for the current studies.

In 2002, the FGBNMS partnered with NOAA's Office of Ocean Exploration, Minerals Management Service, and U.S. Geologic Survey and obtained high-resolution multibeam charts of twelve topographic features in the Northwestern Gulf of Mexico. The success of recent efforts to characterize and describe these habitats have been greatly enhanced by these charts - submersible dives are planned and tracked using these datasets, and post-processed imaging and data is subsequently georeferenced.

Over the past 5 years the FGBNMS has initiated and carried out 6 dedicated Remotely Operated Vehicle (ROV) cruises and 2 manned submersible cruises targeting the NW Gulf of Mexico topographic features. The purpose of this document is to highlight one of these features, Bright Bank.



Nitro Deep Rover

Nitro Deep Rover

Nitro Deep Rover

NATIONAL MARINE
SANCTUARIES
FLOWER
GARDEN BANKS



NOAA's National Ocean Service



Image 1

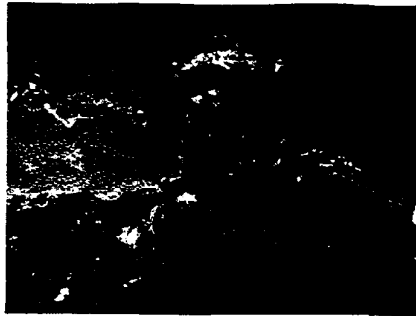


Image 2

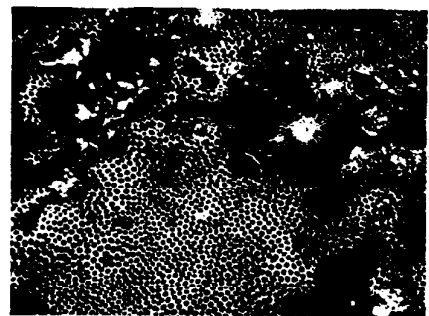


Image 3

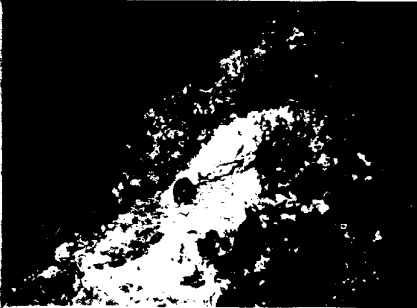


Image 4



Image 5

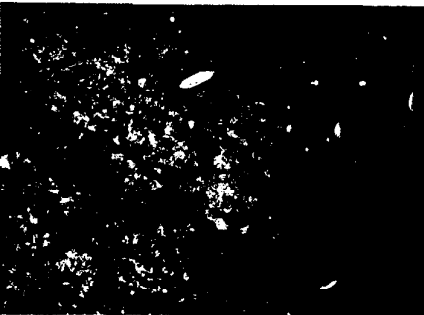


Image 6



Image 7

Observations:

Bright Bank was first described in a Northwestern Gulf of Mexico Topographic Features study in late 1970's/early 1980's funded by U.S. Dept. of Interior's Bureau of Land Management and conducted by Texas A&M University.

This bank was selected as a target site for current investigations due to the reports of the existence of moderately large coral colonies in patch reefs covering 50m or more.

Our limited observations at the site have confirmed the presence of a coral community, including *Diploria strigosa* (image 1&6), *Montastraea cavernosa* (image 2), *Stephanocoenia intercepta* (image 3), and *Millepora alcicornis* (image 4&5) between 34m and 43m depth. The extent of this coral community is still not well documented, and warrants further investigation.

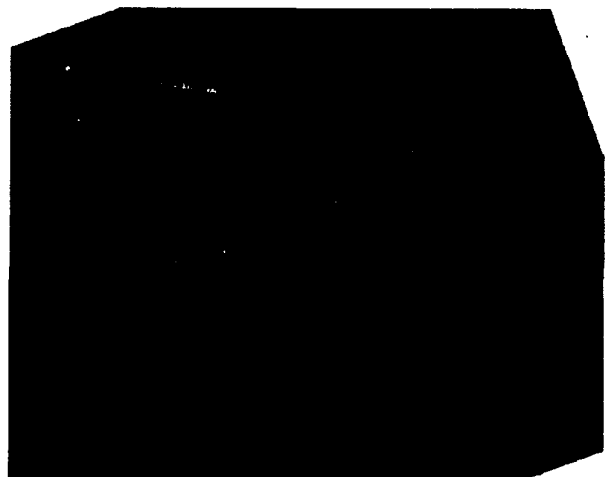
Disturbing observations included two excavations (image 8&9), approximately 3m diameter, in the coral cap region. Discarded debris including pipes, and perhaps a hydraulic drilling rig were noted in the immediate vicinity. Image 1 shows a brain coral head approximately 1m across. The same head is encircled in Image 6, in front of remnants of large overturned coral boulders.

Bright Bank is afforded protection from oil and gas activities through Minerals Management regulations and from direct fishing activities by the National Marine Fisheries Service. This coral reef resource is not protected from other types of activities such as anchoring, and salvage operations. Images 6-8 are examples of perturbations documented in 2003.

FMI contact G.P. Schmahl
Flower Garden Banks NMS
george.schmahl@noaa.gov
979-846-5942

Underwater images courtesy of
NOAA/FGBNMS and NURC/
UNCW

Image 8





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

DEC 01 2003

Roy E. Crabtree, Ph.D.
Regional Administrator
NOAA Fisheries
Southeast Region
9721 Executive Center Drive North
St. Petersburg, Florida 33702
GOM Fisheries

RA 2 DRA 2 NEPA 2 12/9/03
Public Affairs SRA SDRA
Copy FISER2 FISERX1
Orig FISER3 FISERX2
Route FISER4 FISERX3
Budget Camp Out
Action FYI Date 12/8/03
Return to

SUBJECT: Draft Environmental Impact Statement (DEIS) for the Generic
Essential Fish Habitat Amendment to the Fishery Management Plans for the Gulf
Of Mexico

Dear Dr. Crabtree:

The Environmental Protection Agency (EPA) is pleased to provide the following comments on the referenced DEIS prepared by the Gulf of Mexico Fishery Management Council under the auspices of the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS; NOAA Fisheries). These comments are offered in accordance with EPA's responsibilities under Section 309 of the Clean Air Act, Section 102(2)(C) of the National Environmental Policy Act (NEPA), and the Council on Environmental Quality's regulations for implementing NEPA.

The purpose of this DEIS was to analyze within each fishery a range of potential alternatives to amend fishery management plans (FMP) in the Gulf of Mexico (GOM), as required by the Magnuson-Stevens Fishery Management and Conservation Act. Specific elements of this DEIS were to analyze for each fishery a range of alternatives to: 1) describe and identify Essential Fish Habitat (EFH) for the fishery; 2) identify actions to encourage the conservation and enhancement of EFH; and 3) identify measures to prevent, mitigate or minimize to the extent practicable the adverse impacts of fishing on EFH. In this DEIS, EFH concepts were used to consider specific alternatives under each of the FMPs (DEIS, pg 2-33). A FMP must describe and identify EFH for the fishery, minimize to the extent practicable the adverse impacts on the EFH caused by fishing, and identify other actions to encourage the conservation and enhancement of that EFH.

EFH is broadly defined as "... those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" (Magnuson-Stevens Act, Section 600.10). Additionally, the Act requires federal agencies that authorize, fund, or conduct activities that "may adversely affect" EFH to consult with the NMFS to develop measures that minimize damage to EFH. If a fishing practice is determined to have an adverse impact on EFH, local

Fishery Management Councils must minimize, to the extent practicable, adverse impacts caused by fishing activities on EFH in their regions. To meet this requirement, Councils may develop measures such as fishing gear restrictions or time/area closures.

Regulatory Challenges to NOAA Fisheries in Designating EFH - Determining which habitats are “essential” presents special challenges for NOAA Fisheries management, who have provided in this DEIS an extensive and comprehensive evaluation of the physical/biological environment, human and administrative environments, fishing methods/gear impacts, and the process of defining EFH. Defining some aquatic habitats - and not others - as “essential” assumes that the state of knowledge of marine science is sufficiently advanced allowing one to delineate essential from non-essential - a dubious supposition when the habitats are ecologically connected one to the other. The definition of what is “essential” for shrimp, for example, could reasonably encompass all of the littoral waters of the GOM, its embayments, and its estuaries - an enormous area that would be difficult to regulate.

What comprises an “essential” fish habitat can be difficult to define because a species’ habitat requirements may change over time, depending if the population is thriving or waning. As members of a population become scarce, or if a species is on the verge of extinction, arguably all habitats that support any life stage of the depleted species become essential. If too many fish are removed by excessive fishing pressure, to such an extent that the entire trophic level of fish becomes extirpated, its place in the food chain (ecological niche) may be replaced by other members of the feeding hierarchy, and the now-depleted species may lose its place in the food web. This “loss of standing” in the feeding hierarchy may explain, in part, why overfishing to the point of population collapse can be so devastating and long-lasting. Natural forces affecting population changes may also be at work: a fish species presence in a habitat may change over the course of, say, a decade, and driven by forces not fully understood by fisheries scientists. Thus the elements defining “essential” fish habitat may be transient, diminishing or expanding with a universe of anthropogenic and/or natural variables, many of which are beyond the reach of resource management authority.

While it would have been possible to declare the entire GOM as EFH, the DEIS observes that this could trigger consultations on a large scale requiring NOAA Fisheries to expend its resources consulting on the universe of activities occurring in the GOM. Therefore NOAA Fisheries adopted a more analytic approach, and instead developed EFH based upon total distribution of the species and life stages within an FMP, and employed NOAA’s database of species/life stage/habitat use. Some of the EFHs are very large. The DEIS also observed that designating EFH habitat may complicate administrative procedures by increasing NOAA Fisheries’ consultation requirements. This issue, and some strategies for managing consultations, are discussed below.

Description and Identification of EFH for Fisheries - The DEIS proposed and described EFHs and FMP summaries for seven fisheries including the Red Drum, Reef Fish, Coastal Migratory Pelagics, Shrimp, Stone Crab, and Spiny Lobster. The preferred alternative,

Alternative 6, identified EFH as being areas of high species density (DEIS, pg 4-8), based upon the NOAA Atlas identifying where the species are known to occur, and an analysis of species and life-cycle relationships with the habitat, and will comprise all estuarine, nearshore, and offshore areas of the GOM out to the 100-fathom depth contour or isobath (DEIS, pg 4-8). Designation of EFH will rely on existing, available information of a species feeding, spawning, and growth to maturity. Because adult coral colonies create their own habitat by furnishing substrate of living and dead coral skeletal material, and the NOAA Atlas does not contain distribution information of coral, the Coral EFH was determined based upon known distribution of corals. To include soft corals and juvenile forms, EFH for corals was expanded to include all pelagic waters of the EEZ.

USEPA1

Consequences For Designation of EFH - NOAA Fisheries has done a fine technical analysis in defining and identifying the habitats to be designated as EFH. Perhaps the most difficult first step in protecting any resource - including EFH - is a clear and unambiguous identification of that resource being protected. The DEIS raised some administrative concerns as a consequence of designating for EFH in the seven FMPs. NOAA Fisheries' concerns stem from two provisions in Magnuson-Stevens: first, every FMP must minimize, to the extent practicable, adverse effects of fishing on EFH (Magnuson-Stevens Section 303(a)(7)); and second, federal agency actions that may adversely affect EFH trigger consultation and/or conservation recommendations (Magnuson-Stevens, Section 305(b)(2)-(4)). Federal agencies proposing to alter habitats in or near EFH, for instance, must consult with NOAA Fisheries to develop EFH conservation measures if the action may adversely affect EFH. The burden of preparing conservation reporting would presumably fall on NOAA Fisheries. Regional fishery councils may then comment on and make recommendations to federal and state agencies regarding any action that may affect the habitat of a fishery resource under local fishery council authority. Arguably, any and all actions potentially affecting EFH, no matter how trivial, could require a consultation and documentation process which could overburden NOAA resources.

The DEIS describes the (DEIS, pg 4-12) administrative issues may evolve following designating EFH, summarized below.

- 1) All fishing activities that might adversely impact EFH must be identified, and alternatives to prevent/mitigate these impacts must be reviewed by the Gulf Council and NOAA Fisheries;
- 2) Designating EFH will trigger more strict consultative reviews (DEIS, pg 4-11) and conservation recommendations prepared for each action;
- 3) Reporting could become extensive, and could include, for example, the issuance of federal permits for private development activities, business, industry projects, and activities by state and local governments;
- 4) Depending upon the EFH conservation recommendation by NOAA Fisheries,

federal agencies might request additional information from applicants (for permits, licences, or funding) to assist the agency in completing the EFH consultation;

5) There may be an added burden to applicants, and that federal agencies as well, who will incur costs as a result of conducting EFH consultations, since time/resources will be required to develop EFH assessments and interagency coordination.

6) NOAA Fisheries and the Gulf Council have no authority to manage the fishing gear under state waters, unless the Secretary of Commerce preempts management authority.

The DEIS provided an inventory of administrative challenges facing NOAA Fisheries, who must comply with the mandates in Magnuson-Stevens. The following strategies and commentary are provided as possible means of overcoming some of the administrative challenges posed in the DEIS.

Designation of EFH Habitats and Higher Agency Costs - Although the DEIS suggested that designation of EFH habitats could result in higher agency costs, there was little documentation substantiating increased costs. If the EFH designation process has placed onerous burdens on agencies/applicants, there may be cost-experience examples from other regions. EFH designations have been completed by the New England Fishery Management Council, Mid-Atlantic Fishery Management Council, and the South Atlantic Fishery Management Council, and it may be possible to consult with these Councils to document what administrative cost increases were experienced in the EFH designation process.

The DEIS did provided some FMP cost data (DEIS, pg 4-13), however, it was difficult to determine which were FMP preparation costs and which were EFH plan costs. The DEIS reported that the NOAA Fisheries Southeast Region had received and commented on 47,432 permit proposals for the Gulf of Mexico from 1982 to 2001, averaging 2,372 per year. With this extensive record, there may be some means for estimating cost data for the permit program.

Abbreviated Consultations - Administrative costs might be reduced by considering "abbreviated consultations" for classes of activities occurring in EFH-designated habitats. NOAA's regulations allow for an abbreviated consultation process whereby NMFS may quickly determine whether, and to what degree, a federal action may adversely affect EFH. The Fisheries' web site (See www.noaa.org; 50 CFR 600.920(h)) offers that an abbreviated consultation is generally applied to federal actions that do not qualify for a general concurrence, but that are not likely to have substantial adverse impacts on EFH. Proposed federal actions that fall under this category may need slight modifications to minimize adverse effects on EFH.

More Strict Consultative Reviews - The DEIS expressed concerns that the EFH

USEPA4

designation might trigger... “more strict consultative reviews and conservation recommendations”. What has been the experience in other regions? The Final EIS could document if EFH designations had resulted in more strict recommendations in other regions. EPA’s understanding is that NMFS recommendations pursuant to EFH are *advisory*, that NMFS does not have veto authority over federal projects adversely affecting EFH, and that EFH designation enables NMFS to provide *guidance* to federal action agencies on ways to tailor their projects to minimize harm to EFH.

USEPA5

State, Local, Non-federal Entities Not Required to Consult on EFH - The DEIS states that NOAA Fisheries has no authority to manage fishing gear in state waters (unless the Secretary of Commerce preempts management authority). In addition, state, local, and non-federal entities are not required to consult with NOAA Fisheries regarding the effects of their actions of EFH, which in EPA’s view, should eliminate administrative resource issues from consideration when dealing with these entities.

Alternative 6 (Preferred Alternative) - Alternative 6 is the suite of management measures the DEIS states are likely to benefit EFH while not causing undue economic or social burdens on fishers (DEIS, pg 4-68). Alternative 6 establishes minor modifications to fishing gears and a gear closure on sensitive habitat to prevent, mitigate, or minimize adverse fishing impacts in the EEZ, and includes the following: 1) regulates fishing weights on vertical gear used over coral reefs in Habitats of Particular Concern (HAPC); 2) prohibits bottom anchoring over coral reefs in HAPCs; prohibits use of bottom longlines, buoy gear, and all traps/pots on coral reefs; 4) prohibits use of trawling gear on coral reefs; and 5) requires a weak link tickler chain of bottom trawls on all habitats.

Alternative 6 Considered: Fishing Impacts on Habitat - The DEIS (pg 3-243) recognizes that fishing impacts may reduce habitat complexity through physical damage on EFH from fishing gear. Trawling for shrimp, calico scallop, flounder and butterfish, and dredging for oysters are destructive to marine benthic habitats. Another factor is how often the equipment is deployed in the same vicinity. Intense fishing activity using substrate-damaging gear places greater stress on the habitat; a single pass with a bottom trawl may have small impact on the marine environment, whereas the cumulative effects of multiple passes are more severe.

Gear-habitat interactions include otter-type trawls for fish and shrimp, roller frame trawls, pair trawls over coral reefs, crab scrape over reefs, and oyster dredges over areas of Submerged Aquatic Vegetation (SAV) (DEIS, pg 3-244). Boats commonly tow one 60-ft net or two 30-ft nets, or may pull four 45-ft nets (DEIS, pg 2-245). Trawls affect the seabed by scraping, ploughing, sediment resuspension, physical habitat destruction, and removal/scattering of non-target benthos, and loss of SAV rhizomes. Damage is done by trawl doors, footropes, tickler chains, and bellies of the net scraping along the bottom. Depending upon the intensity of trawling, cumulative impacts may generate long-term changes on benthic community. Trawls used on soft bottoms may remove several centimeters of sediment, and these trawl tracks may still be present more than a year later (see Ball, cited in DEIS pg 3-246).

Mechanical harvesting of oysters using dredges takes both living and attached shells and has been blamed for the degradation of the oyster reef habitat (DEIS, pg 3-262). Researchers have observed that less than one season of oyster dredging reduced the height of restored oyster reefs by approximately 30 percent. At an annual removal rate of 30 percent, restored reefs would be entirely destroyed in four years. The DEIS also reports that intensive dredging over a period of years left widely scattered oysters and little substrate for future crops of oysters (See Chestnut in DEIS, pg 3-262). Also reported was that dredging mixed the sandy-mud layer and the underlying clay bottom, with decreased benthic fauna in the dredged sites versus the un-fished control sites (See Glude and Landers in DEIS, pg 3-262).

USEPA6

Weaknesses of Alternative 6 - Given the short-term and long-term impacts of trawling and dredging on the marine environment (including EFH) that are reported in the DEIS, the management measures proposed in Alternative 6 do not seem adequate to protect these habitats. EPA does not see how Alternative 6 protects EFH against the impacts of trawling and dredging from scraping, ploughing, sediment disturbance, and physical benthic habitat destruction, all of which were documented in the DEIS as clearly having deleterious effects on the benthic communities. Alternative 6 does not protect oyster reef habitats from reduction due to dredging. While Alternative 6 gear restrictions would protect coral reefs from trawling and anchoring, it does not address non-coral regions which comprise the bulk of the EFH habitats within the 100 fathom isobath.

USEPA7

Marine Protected Areas - The Alternatives should consider how Marine Protected Areas (MPA) can be used as a means to minimize the adverse effects of fishing on EFH. MPAs are important tools for promoting the sustainable use and conservation of natural resources. An MPA can be defined as any area of intertidal or subtidal terrain, along with its overlying water and associated flora and fauna, which has been reserved by law or other means to protect part or all of the enclosed environment (Brody, 1996). Executive Order 13158 directs federal agencies to conserve the nation's valuable marine resources through a variety of tasks related to MPAs. It directs the federal government to work with public and private partners to significantly strengthen and expand the national system of MPAs.

Well-planned MPAs can not only protect critical habitat and general ecosystem functions, but can meet the needs and even enhance the opportunities of many different stakeholders living in a region. MPAs can be created using science-based identification and prioritization of natural and cultural resources for additional protection. Typical objectives can include conserving habitats on which priority species depend, enhancing commercially important fish stocks, supporting marine research, promoting marine interpretation and education, creating areas for tourism and recreation, and reducing existing and future user conflicts.

USEPA8

Habitat Creation and Artificial Reefs - The Alternatives might consider the benefits/disadvantages of habitat creation as another means to enhance and conserve EFH. Texas, Louisiana, Mississippi, Alabama, and Florida have programs enhancing fish habitats. For example, beginning in 1953, Alabama permitted individuals to deploy a wide variety of materials

as reefs; however, to prevent debris from washing up on beaches, artificial reefs today are made of concrete specially designed as reef structures. The current artificial reef program in coastal Alabama is the product of an informal cooperative agreement between the U.S. Corps of Engineers and the Marine Resources Division of the Alabama Department of Conservation and Natural Resources. Approximately 1,200 square nautical miles are included in the artificial reef general permit areas offshore Alabama making this the largest artificial reef program in the United States. The natural bottom offshore of Alabama is predominately flat sand bottom; this bottom type attracts few fish that are of recreational or commercial value. As various encrusting organisms such as sponges and corals cover the artificial reef material, small animals take up residence. It has been long known that if vertical relief is created on this type of bottom, many reef fish such as snappers and groupers will be attracted. The waters off Alabama have one of the nation's most robust red snapper populations. Comprising just five percent of the GOM's U.S. coastline, Alabama's beachfront were reported as producing between 30 to 40 percent of the red snapper caught recreationally in the Gulf (Bailey, 2001).

USEPA9

Rotational Management - The Alternatives might consider rotational management in the Final EIS as a means to protect and enhance EFH. This management strategy, similar to crop rotation in land-based agriculture, is described in the 2003 draft Atlantic Sea Scallop Fishery Management Plan prepared by the New England Fishery Management Council. (The following concepts were summarized from the New England Fishery Council's Atlantic Sea Scallop FMP/SEIS.) When a fishery resource is diminished to below sustainable yields, or where the effects on habitat or bycatch are high, fishing effort can be reduced by strategically closing areas. Areas could be closed over a long term (years) (NEFMC pg 5-13) to protect certain resources, or in other cases, areas might close seasonally to avoid bycatch. Area rotation would establish a planned set of criteria or guidelines that would regularly close areas to fishing when small target fish species are more abundant than large fish. Areas would close when the expected increase in exploitable biomass exceeded a pre-defined level, and then re-open to fishing when stocks had recovered. Area closures could be distributed geographically along the coastline to ensure local areas remain open for fishing by vessels from nearby ports. Area boundaries could be fixed according to similarities of target fish biology (as in snapper) and productivity, further divided into habitat sensitivity and bycatch vulnerability zones.(NEFMC pg 5-27)

Summary and Conclusions - The technical materials found in the DEIS were thorough and comprehensive, and EPA supports the NOAA Fisheries designation of EFH for the subject fisheries. EPA has suggested some strategies to potentially reduce the administrative burden of consultations which may result if the EFHs are finalized. The Preferred Alternative 6 contained proposed gear restrictions to protect coral reefs from trawling and anchoring; however, it did not address protecting non-coral regions which comprise the bulk of the EFH habitats within the 100 fathom isobath. Alternative 6 would be substantially improved if marine protected areas, habitat/reef creation, and rotational strategies were considered as EFH management measures. EPA rates the subject DEIS "EC-2", that is, the review identified environmental impacts that should be avoided in order to protect EFH, and identified options that were within the spectrum of alternatives analyzed in the DEIS which would reduce the environmental impacts on EFH, yet

were not considered in the Alternatives. For more information, please call John Hamilton at (404) 562-9617.

Sincerely,



Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Literature Cited

Bailey, Ronald, 2001. Reef Madness: How Alabama Fishermen are Repopulating the Sea, in Reason Magazine (rbailey@reason.com)

Brody, Sam, 1996. Marine Protected Areas in the Gulf of Maine: A Survey of Marine Users & Interested Parties. Gulf of Maine Council on the Marine Environment. The Maine State Planning Office, 38 State House Street, Augusta, ME 04333

NEFMC, 2003. Draft Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan with a Supplemental Environmental Impact Statement. Prepared by the New England Fishery Management Council, in consultation with the National Marine Fisheries Service and the Mid-Atlantic Fishery Management Council, 50 Water Street, Newburyport, MA 01950