

## Project Summary

**Applicant Organization:** Alabama Department of Conservation and Natural Resources / Marine Resources Division (AMRD)

**Project Title:** Acquisition and Development of a Habitat Material Staging Area in Alabama

**Site Location:** Baldwin County, Alabama

**Land Owner:** State of Alabama / Department of Conservation and Natural Resources, United Properties Group LLC

**On-the-Ground Implementation State Date:** Implementation of the proposed project will begin immediately upon the awarding of this grant. Site preparation and development will begin following the acquisition of a habitat staging site.

**Number and types of jobs created or maintained:** The total jobs directly created by the programs submitted under this project are estimated to exceed forty (40) individuals. Employment indirectly supported by this program will include, but are not limited to, (1) marine equipment manufactures and suppliers, (2) fuel docks, and (3) construction materials manufacturers. Funding of these indirect jobs will be supplied by the tasks of this project. Sustained employment through the staging and deployment of materials stored at this location will be achieved.

1. State Marine Biologists – 3
2. State Engineers – 3
3. Staging Site Contractor(s) and Skilled Laborers – 30+
4. State Accountants and Clerical Staff– 5

**Coastal and marine habitats to benefit from the project:** The waters of coastal Alabama, including but not limited to Mobile Bay, Mississippi Sound, Bon Secour Bay, Wolf Bay, Perdido Bay, and nearshore Gulf waters, in addition to areas located in Alabama's offshore artificial reef zone will benefit from this program.

**Project Scope:** The goals of this project are to develop and administer programs to (1) acquire properties adjacent to existing State properties in Baldwin County, AL and (2) renovate said properties through competitive contracts for use as a staging site for habitat materials. Renovation activities are to include the dredging of an existing barge basin, stabilization of the existing shoreline, construction of a loading dock, and security fencing.

**Project Outputs/Outcomes:** Properties with water accessibility for barges and large equipment in coastal Alabama are in limited supply. Locations at which habitat materials can be stored (staged) prior to deployment are less readily available. AMRD has to reject donations of potential habitat materials at times of limited funding due to the inability to store such materials. As funding becomes available, materials needed to create or enhance submerged habitats are often purchased because previously offered materials have been disposed of by donators,

resulting in inflated project costs and/or a reduction in the area of habitat that is created or enhanced.

This project will provide AMRD with a location to stage materials to be used during future habitat creation and restoration projects. AMRD would be able to accept suitable materials for habitat enhancement offered as donations, resulting in potential increases in the areas enhanced. AMRD expects to accomplish the task of providing employment through site preparation, as well as, long-term employment through the future deployment of materials stored at this location.

Suitable habitat is essential to the production and recruitment of many marine species. The rehabilitation and creation of submerged habitats enhances the production of numerous marine species thereby increasing fishing opportunities for both commercial and recreational sectors. These stock increases are anticipated to result in an economic stimulus not only to the direct users of these resources (fishermen) but also to indirect beneficiaries such as seafood dealers, bait and tackle shops, boat dealers, and even the tourist industry through visiting anglers.

**Project Time Line:** Activities of this project will begin on the award date and are anticipated to be completed in eighteen (18) months.

**Permits and Approvals:** AMRD will expeditiously apply for the necessary U.S. Army Corps of Engineers and civil permits to conduct renovation activities should this grant be approved.

**Project Budget:**

<b>Jobs</b>	<b>Federal Funds Requested</b>	<b>Non-Federal Match Anticipated</b>
Acquisition of Habitat Material Staging Site	\$5,500,000	\$0
Contracts for Competitive Development of Habitat Staging Site	\$1,515,000	\$0
Grant Administration / Program Oversight	\$46,965	\$0
<b>Total</b>	<b>\$7,061,965</b>	<b>\$0</b>

**Overall Project Cost:** \$7,061,965

## **Project Narrative**

The goals of this project are to develop and administer programs to (1) acquire properties adjacent to existing State properties in Baldwin County, Alabama and (2) renovate said properties through competitive contracts for use as a staging site for habitat materials. Through the accomplishment of this project, the Alabama Department of Conservation and Natural Resources (ADCNR) / Marine Resources Division (AMRD) seeks to provide short-term employment through site development and sustained, long-term employment through the operation of future habitat enhancement projects.

### **Importance and Applicability:**

Suitable habitat is essential to the production and recruitment of many marine species. The rehabilitation and creation of submerged habitats enhances the production of numerous marine species thereby increasing fishing opportunities for both commercial and recreational sectors. These stock increases are anticipated to result in an economic stimulus not only to the direct users of these resources (fishermen) but also to indirect beneficiaries such as seafood dealers, bait and tackle shops, boat dealers, and even the tourist industry through visiting anglers.

AMRD recognizes importance of habitat, whether natural or artificial, to the sustainability of healthy fishing stocks. Significant efforts have been made to enhance, rehabilitate, and create habitat in Alabama's inshore, nearshore, and adjacent offshore waters. A total of twenty-five (25) inshore fishing habitats located within Mobile, Bon Secour, and Perdido Bays and Mississippi Sound have been created or enhanced (Figure 1). Concrete bridge materials, concrete culvert pipes, concrete roof panels, oyster shells and crushed limestone were utilized as habitat materials. Of the twenty-five, seven (7) gas production platforms in lower Mobile Bay have been enhanced by placing limestone rock fish-attracting pads adjacent to the structure. Two new artificial habitats are planned for Perdido Bay and Bon Secour Bay. AMRD currently possesses permits to conduct these activities.

Alabama's offshore artificial habitat building program started in 1953 when the Orange Beach Charter Boat Association asked for the authority to place 250 car bodies off Baldwin County, Alabama. This proved to be very successful, and in the years since, many different types of materials have been placed offshore of Alabama. These artificial habitats have included additional car bodies, culverts, bridge rubble, ships, barges, planes and even army tanks.

In 1987, a general permit, encompassing almost 800 square miles, was issued by the U. S. Army Corps of Engineers (USACE) creating specific areas offshore of Alabama for the creation of artificial habitats. These areas were created in an effort to provide locations for habitat materials in order to coordinate with other users of the offshore area. In late 1997, the USACE authorized an expansion of Alabama's artificial habitat construction areas to allow for greater freedom in habitat placement and greater variety in depth. Today, the combined area for all offshore habitat permit zones now encompasses approximately 1260 square miles (Figure 2). Since the establishment of the zones, AMRD has permitted more than 20,000 artificial structures deployed by public and private sectors.

AMRD is mindful of the health of other marine habitats. Alabama's oyster reefs sustained significant damages due to Hurricanes Ivan and Katrina (2004 and 2005). Approximately 80% of Alabama's oyster reefs were severely damaged by Hurricane Ivan. Hurricane Katrina damaged 20% of the recovering reef the following year. AMRD has implemented a series of cultch planting programs utilizing federal disaster recovery funds to assist in recovery efforts. Local contractors and licensed commercial fishermen have been employed to conduct these rehabilitation activities. A total of 108,555 cubic yards of cultch material has been planted through these programs. AMRD will continue cultch planting activities in 2009.

Fishing revenues generated from Alabama's coastal and adjacent waters produces significant contributions to Alabama's economy. According to the NOAA Fisheries publication entitled *Fisheries Economics of the U.S., 2006*, the 2006 Sales/Revenue Impacts for Alabama's commercial seafood sector totaled over \$492 million and supported 11,038 jobs. The 2006 Sales/Revenue Impacts for Alabama's recreational fishing sector totaled over \$630 million and supported 6,572 jobs. The Alabama Gulf Coast Convention and Visitors Bureau, citing the *Economic Impact of Alabama Travel Industry 2007*, reported that in 2007, Baldwin County received 4.7 million annual visitors who contributed \$2.3 billion in travel-related expenditures resulting in 41,969 travel-related jobs with \$909 million in travel-related wages. Many of these visitors enjoyed water-related activities such as eco-tours, fishing, diving, and recreational boating.

The availability of staging sites for the storage of suitable habitat material is essential to the efficient and successful operation of projects involving habitat enhancement. In recent years, coastal properties in Alabama, especially those possessing waterfront access for barges and large equipment, have become limited. Temporary staging sites once used by AMRD are now unavailable or available for very short periods of time. As a result, donations of potential habitat materials are often rejected resulting in large quantities of these materials being diverted to area landfills.

AMRD has identified a suitable site adjacent to existing State properties in Baldwin County (Figure 3). The site, approximately 12 acres, is centrally located on the Gulf Intracoastal Waterway (GIWW) between Gulf Shores and Orange Beach thus providing easy access to both Mobile and Perdido Bays and offshore artificial habitat zones. The said property will be renovated through competitive contracts with qualified vendors. Renovation activities are to include the dredging of an existing barge basin (Figure 4), stabilization of the existing shoreline, construction of a loading dock, and security fencing.

Through this project, AMRD seeks to accomplish several tasks. The first task is to acquire a staging site on which habitat materials can be stored prior to deployment, ensuring the ability to accept donations of suitable habitat material when available. Such donations will reduce the costs associated with the enhancement and/or creation of marine habitats by reducing purchasing costs of habitat materials. The second task is to provide direct economic assistance to local contractor(s) through the development of the proposed site and indirect, long-term assistance to vested user groups through continued habitat enhancement efforts.

**Technical/Scientific Merit:**

This project will provide AMRD with a location to stage materials to be used during future habitat creation and rehabilitation projects. AMRD would then be able to accept suitable materials for habitat enhancement offered as donations resulting in potential reductions in project costs and increases in areas enhanced. Permits needed to complete renovation and construction activities will be expeditiously submitted upon acquisition of the staging site. This project is anticipated to be completed within eighteen (18) months of the award date. Ecological benefits of this program will not be noticeable immediately following the conclusion of this program as habitats created or enhanced will require time to flourish. These benefits will be measured through ongoing AMRD fisheries dependent and independent data collection programs.

The acquisition of a habitat material staging area and site preparations will be conducted through a competitive application process. Direct employment (created or maintained) for more than forty (40) individuals is expected. AMRD will provide three (3) marine biologists to administer this project and three (3) ADCNR engineers will direct construction activities. Contractors will be hired to conduct all renovation and construction activities thus providing short-term and/or sustained jobs to more than thirty (30) skilled laborers and equipment operators. Accounting and clerical work is projected to sustain employment for at least five (5) employees of ADCNR and AMRD. Employment indirectly supported by this program will include, but are not limited to, (1) marine equipment manufactures and suppliers, (2) fuel docks, and (3) construction materials manufacturers. Funding of these indirect jobs will be supplied by vendor(s) contracted to perform the renovation and construction activities. Sustained employment through the staging and deployment of materials stored at this location, and ultimately vested users, will be achieved.

The monitoring of work activity will be conducted by AMRD and all contractors involved. Performance measures will be collected daily and reported at the prescribed intervals defined by the granting authority using the North American Industry Classification System (NAICS). An example of the reporting system to be used along with anticipated NAICS codes can be found below in Table 1.

Table 1: Example of Format to be Used for Reporting Project Work Activities

Code	Business Activity	Labor Hours	# People Employed on Grant Activities	Grant Funds Allocated to the Business Activity
924120	Administration of Conservation Programs			
237310	Other Heavy and Civil Engineering Construction			

**Overall Qualifications of Applicants:**

AMRD, operating under the authority of ADCNR, is responsible for the management of Alabama’s marine fisheries resources through research and enforcement programs. As such, AMRD has the technical staff and expertise necessary to accomplish the proposed work. Below

is a list on AMRD employees who will coordinate the activities of this grant. These individuals have a combined experience in state resource management of over 48 years. A curriculum vita of each can be found at the end of this document.

1. R. Vernon Minton, Director of AMRD
2. F. Christopher Denson, Biologist IV
3. Kevin J. Anson, Biologist III

**Project Costs:**

The projected costs associated activities of this project are itemized below in Table 2. Project costs by categorized line item are presented in Table 3.

Table 2: Project Total by Job

<b>Jobs</b>	<b>Federal Funds Requested</b>	<b>Non-Federal Match Anticipated</b>
Acquisition of Habitat Material Staging Site	\$5,500,000	\$0
Contracts for Competitive Development of Habitat Staging Area	\$1,515,000	\$0
Grant Administration / Program Oversight	\$46,965	\$0
<b>Total</b>	<b>\$7,061,965</b>	<b>\$0</b>

Table 3: Project Total by Job

<b>Category</b>	<b>Federal Funds Requested</b>	<b>Non-Federal Match Anticipated</b>
Personnel	\$32,575	\$0
Fringe	\$12,152	\$0
Travel	\$1,238	\$0
Equipment	\$500	\$0
Supplies	\$500	\$0
Contractual	\$0	\$0
Construction	\$7,015,000	\$0
Other	\$0	\$0
<b>Total Direct Charges</b>	<b>\$7,061,965</b>	<b>\$0</b>
Indirect Charges	\$0	\$0
<b>Total</b>	<b>\$7,061,965</b>	<b>\$0</b>

**Outreach and Education:**

Public outreach and education is a key component of AMRD’s mission goals. Habitat enhancement activities resulting from the activities of this grant will be disseminated to the public through a variety sources. AMRD distributes over 70,000 marine informational calendars annually. These calendars contain a wealth of information including coordinates for material

placed in Alabama's offshore reef zone, coordinates of inshore habitat areas, and educational material addressing marine debris, as well as other conservation topics. AMRD also produces the publication *Guide to Alabama's Offshore and Inshore Artificial Reefs*. The coordinates for the habitats enhanced and materials deployed will be included in the next printing of these publications, as well as placed on the ADCNR website (<http://www.outdooralabama.com/fishing/saltwater>). AMRD will work in cooperation with local newspapers, magazines, and special interest groups to disseminate this information. Costs of information distribution will be incurred by AMRD; funds from this grant will not be used.

**R. Vernon Minton**  
Director, Marine Resources Division  
Alabama Department of Conservation

Marine Resources Division  
P.O. Drawer 458  
Gulf Shores, Al 36547  
Ph: 251-968-7576  
vernon.minton@dcnr.alabama.gov

**EDUCATION:**

M.S. Fishery Management/Aquaculture, *Auburn University*, Auburn, Alabama, 1978  
B.S. Fishery Biology, *Michigan State University*, East Lansing, Michigan, 1972

**FIELD OF SPECIALIZATION:**

Fishery Management, Marine Finfish Culture

**CURRENT RESPONSIBILITIES:**

Direct the management of the marine resources of the state of Alabama including shrimp, finfish and oysters.

Direct the activities of AMRD's marine research center (Claude Petet Mariculture Center)

Represent the state as a voting member of the Gulf of Mexico Fishery Management Council and the Gulf States Marine Fisheries Commission.

**SELECTED PUBLICATIONS:**

**Minton, R. V.** and S. R. Heath, 1998. Alabama's Artificial Reef Program: Building Oases in the Desert.

Harrell, R., H. Kirby, **R. V. Minton.** 1990. Guidelines for Striped Bass Culture. American Fisheries Society, Striped Bass Committee, 387pp.

**Minton, R. V.** and M. S. VanHoose. 1988. Red drum tagging, age verification and age at length studies. National Marine Fisheries Service, Marine Fisheries Initiative, First Annual Conference, 20-21 September 1988, Tampa, Fl.

Hawke, J. P., S. M. Plakas, **R. V. Minton**, R. M. McPhearson, T. G. Snider, and A. M. Guarino, 1987. Fish Pasteurellosis of Cultured Striped Bass (*Morone saxatilis*) in coastal Alabama. *Aquaculture*, 65: 193-20.

**Minton R. V.**, Hawke J. P., and W. M. Tatum. 1983. Hormone Induced Spawning of Red Snapper, *Lutjanus campechanus*, *Aquaculture* 30:363-368

**F. Christopher Denson**  
Biologist IV, Marine Resources Division  
Alabama Department of Conservation

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**EDUCATION:**

M.S. Marine Science/Biology, *University of Alabama*, Tuscaloosa, Alabama, 2000  
B.S. Marine Science/Biology, *University of Alabama*, Tuscaloosa, Alabama, 1997

**FIELD OF SPECIALIZATION:**

Fisheries Management, Marine Biology, Marine Ecology

**CURRENT RESPONSIBILITIES:**

Assistant Chief Biologist and district supervisor for Baldwin County.  
Coordinate data collection activities with Mobile County supervisor.  
AMRD representative in absence of Chief Biologist.  
Managing supervisor of state commercial fisheries data collection activities.

**SELECTED PUBLICATIONS:**

Report to Congress on the Impacts of Hurricanes Katrina, Rita, and Wilma on Alabama, Louisiana, Florida, Mississippi, and Texas Fisheries. 2007. U.S. Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service Silver Spring, Maryland.

**Denson, C.** 2006. Managing Alabama's Commercial Fisheries: The Alabama Trip Ticket Program. *Alabama - Mississippi Bays & Bayous Symposium*. Mobile, AL. November 27-29, 2006. The Mobile Bay National Estuary Program in Partnership with Mississippi-Alabama Sea Grant Consortium and the Alabama Center for Estuarine Studies.

Chang, S., **C. Denson**, and K. Anson. 2006. Estimation of Financial Losses to Alabama's Seafood Industry Due to Hurricane Katrina. *International Journal of Mass Emergencies and Disasters*. Vol. 24, No. 3, pp. 391-402.

Chang, S., **C. Denson**, and K. Anson. 2006. Economic impact of Hurricane Katrina on the Alabama seafood industry. CBER Research Report #63.

**Denson, C.** 2004. Managing Alabama's Marine Fisheries. *Outdoor Alabama*. Vol. LXXVI, No. 3, pp. 22-25.

**Denson, C.** 2000. Ichthyofaunal comparisons at sites adjacent to the Mobile Bay discharge system in the Northeastern Gulf of Mexico. *Gulf of Mexico Symposium 2000*. 9-12 APRIL 2000.

**Kevin J. Anson**  
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**EDUCATION:**

M.S. Fisheries and Allied Aquacultures, *Auburn University*, Auburn, Alabama, 1993  
B.A. Anthropology, *Florida Atlantic University*, Boca Raton, FL, 1991

**FIELD OF SPECIALIZATION:**

Fisheries Management, Aquaculture

**CURRENT RESPONSIBILITIES:**

Recreational fisheries survey coordinator.  
State marine artificial habitat coordinator.  
Federal Assistance Coordinator for Fish and Wildlife Service grants.

**SELECTED PUBLICATIONS:**

- Report to Congress on the Impacts of Hurricanes Katrina, Rita, and Wilma on Alabama, Louisiana, Florida, Mississippi, and Texas Fisheries, 2007. U.S. Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service Silver Spring, Maryland.
- Chang, S., C. Denson, and **K. Anson**. 2007. Estimation of financial losses to Alabama's seafood industry due to Hurricane Katrina. *International Journal of Emergency Disasters* 24:391-402.
- Chang, S., C. Denson, and **K. Anson**. 2006. Economic Impact of Hurricane Katrina on the Alabama Seafood Industry. CBER Research Report #63.
- Anson, K. J.**, and D. B. Rouse. 1996. Evaluation of several commercial feeds and a crustacean reference diet for juvenile Australian red claw crayfish, *Cherax quadricarinatus*. *Journal of Applied Aquaculture* 6:65-76.
- Anson, K. J.**, and D. B. Rouse. 1994. Effects of salinity on hatching and post-hatch survival of the Australian red claw crayfish *Cherax quadricarinatus*. *Journal of the World Aquaculture Society* 25:277-280.

Figure 1: Alabama's Inshore Fishing Reefs



Figure 2: Alabama's Permitted Offshore Habitat Zones

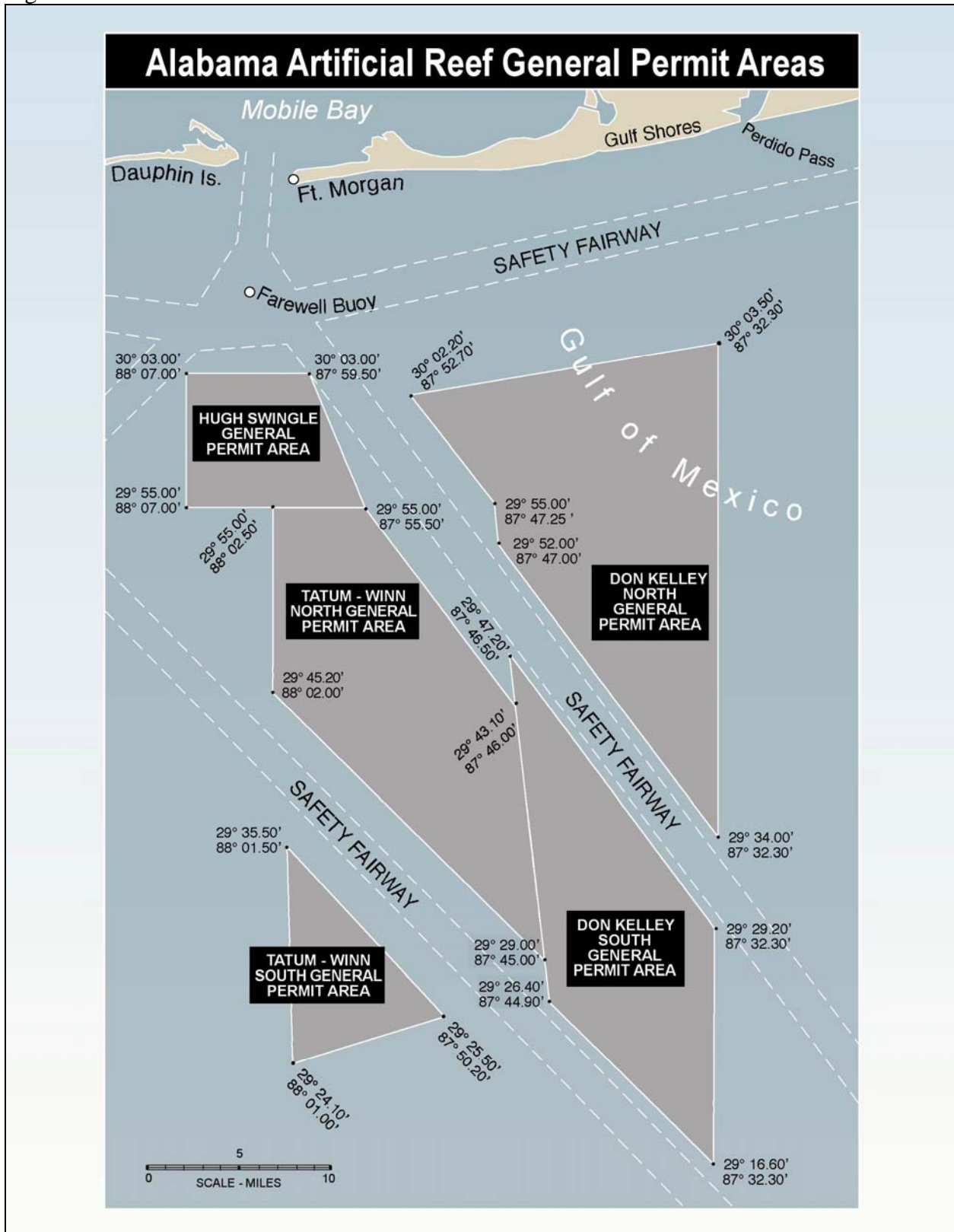


Figure 3: Proposed Habitat Staging Site and AMRD Property



Figure 4: Proposed Habitat Staging Site



OFFICE OF THE GOVERNOR

BOB RILEY  
GOVERNOR



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## STATE OF ALABAMA

April 1, 2009

Mr. Craig Woolcott  
NOAA Office of Habitat Conservation  
NOAA Fisheries  
1315 E West Hwy, Room 14853  
Silver Spring, MD 20910-6233

Dear Mr. Woolcott:

As an active supporter and participant in the Gulf of Mexico Governors' Alliance, I promote region-wide coordinated efforts that protect, conserve, and restore our natural resources. Accordingly, I support the attached multi-state application relating to habitat restoration associated with the National Oceanic and Atmospheric Administration (NOAA) Federal Funding Opportunity (FFO). Further, I request consideration of full funding for all of the projects associated with this submittal.

The U.S. states that border the Gulf of Mexico (Gulf) have a gross domestic product of over \$2 trillion annually and provide jobs for more than 20 million people. Much of this economic activity is dependent on or related to the Gulf and its natural resources. The Gulf's coastal ecosystem provides our nation with an abundance of natural resources. These include but are not limited to commercial and recreational fisheries, wildlife, energy, navigation and shipping, excellent beaches, tourism, and a rich and colorful cultural heritage. This ecosystem contains half the wetlands in the United States, yet it is undergoing the greatest loss of coastal wetlands. The tragic storms of recent years show how vulnerable the Gulf Coast and its citizens, industry, and natural resources are to these hurricanes. Each of these storms has demonstrated how closely linked our quality of life is to the health of our coasts. These recent hurricanes have also underscored the need for a strong cooperative effort between Gulf States to strengthen our resiliency and the need to work together for the good of the region and the nation. The biological diversity of this ecosystem is not bound by political boundaries. Therefore, it is imperative that the region's ecosystem be sustained. To do less would jeopardize the U. S. and the region's economics, recreational experiences, seafood production and processing, and overall quality of life.

It is my intent to cooperate on targeted natural resource management issues to increase government effectiveness and efficiency which will lead to a healthier ecosystem, enhanced fisheries and wildlife habitats, and an improved quality of life. By working together to improve these ecosystems our accomplishments will serve as a lasting legacy for all Gulf state residents and visitors alike and ensure that the resources will be available for future generations.

Sincerely,

A handwritten signature in black ink that reads "Bob Riley".

Bob Riley  
Governor

ALABAMA  
Governor  
*Bob Riley*

FLORIDA  
Governor  
*Charlie Crist*

LOUISIANA  
Governor  
*Bobby Jindal*

MISSISSIPPI  
Governor  
*Haley  
Barbour*  
CHAIRMAN

TEXAS  
Governor  
*Rick Perry*

April 5, 2009

NOAA Office of Habitat Conservation  
NOAA Fisheries  
1315 East West Highway  
Room 14853  
Silver Spring, MD 20910

On behalf of the Gulf of Mexico Alliance Management Team, I want to wholeheartedly endorse the attached proposal focused on restoration of state-owned lands. The efforts described will result in a significant increase in ecosystem function at the state level and, in conjunction with similar proposals submitted by the other Gulf of Mexico states, at the regional level as well.

The Gulf of Mexico Alliance is a partnership among the states of Alabama, Florida, Louisiana, Mississippi, and Texas, with the goal of significantly increasing regional collaboration to enhance the environmental and economic health of the Gulf of Mexico. By working together on priority regional issues, the five Gulf States are committed to realizing the benefits of shared management successes and coordinated environmental improvement activities and ultimately striving toward a common regional vision and strategy for enhancing the Gulf of Mexico region. The Alliance is led by the governors of the five Gulf States, with Mississippi Governor Haley Barbour serving as lead. The Alliance Management Team, comprised of gubernatorial appointees in each state or their designees, is tasked with providing focus and vision to the Alliance.

The catastrophic storms of 2005 and later years have shown how vulnerable the Gulf Coast and its citizens, industries, and natural resources are to these hurricanes. These storms also showed very clearly the protective role natural wetlands and barrier islands play. While these wetland areas did indeed provide significant protection against the storms of 2005, they were also devastated by them. To restore the protective capacity of these wetland areas, we must restore the footprint and the functionality of these natural systems. The attached proposal and those from the other Gulf States focus on doing just that, and I encourage you to fund each of them at the requested level.

Sincerely,



William W. Walker, Ph.D.  
Chair, Gulf of Mexico Alliance Management Team