



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, MOBILE DISTRICT  
P.O. BOX 2288  
MOBILE, ALABAMA 36628-0001

Regulatory Division  
Coastal Branch

January 8, 2009

**JOINT PUBLIC NOTICE SAM-2008-1990-JBM  
U.S. ARMY CORPS OF ENGINEERS**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF POLLUTION CONTROL**

**MISSISSIPPI DEPARTMENT OF MARINE RESOURCES**

**Maintenance Dredging and the Discharge of Dredged Material  
To Restore the Deer Island Marsh Restoration Project  
Biloxi, Harrison County, Mississippi**

TO WHOM IT MAY CONCERN:

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). Please communicate this information to interested parties.

**APPLICANT:** Mississippi Department of Marine Resources  
**Attention:** Mr. George Ramseur  
1141 Bayview Avenue  
Biloxi, Mississippi 39530

**WATERWAY:** Mississippi Sound, Deer Island, Biloxi, Harrison County, Mississippi.  
(Lat. 30.3665° N; Long. 88.8194° W).

**WORK:** The applicant proposes to repair and reestablish the Deer Island Marsh Restoration Project which was adversely impacted by tropical storms Ivan and Karina. The site was first established in 2002 by the Corps of Engineers for the Biloxi Harbor Navigation Project. The currently proposed work includes re-dredging 8,900 cubic yards of material from an the access channel originally used to construct the project and the discharge of up to 100,000 cubic yards of dredged material to restore marsh design elevations. The proposed access channel dimensions are 1,000 feet in length, by 60 feet in width by -6 feet, mean lower low water. The 8,900 cubic yards of material dredged from the access channel would be mechanically excavated and side-cast into a 150-foot-wide area west of the channel. The access channel would be maintained in this manner over the life of the project as needed. 100,000 cubic yards of dredged material from various local projects (e.g. Graveline Bayou) would be used to restore the wetland site. The local dredging

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projects will be evaluated and permitted independently from the proposed action. Prior to use the dredged material would be tested and approved by the Mississippi Department of Environmental Quality. The applicant intends for the project to be a model from which a series of pre-approved beneficial use projects could be developed in accordance with the *Long-Term Comprehensive Master Plan for Beneficial Uses of Dredged Material Along Coastal Mississippi*. See the attached drawings and environmental assessment for additional details.

The applicant has applied for certification from the State of Mississippi in accordance with Section 401(a)(1) of the Clean Water Act, and upon completion of the required advertising, a determination relative to certification will be made.

The applicant has certified that the proposed activity complies with and will be conducted in a manner that is consistent with the State Coastal Zone Management Program. A determination relative to consistency will be made by the Mississippi Department of Marine Resources.

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the U.S. Army Corps of Engineers (Corps) can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources.

The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public

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hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing.

The National Register of Historic Places has been consulted and no properties listed in or eligible for the National Register are known to exist which would be affected by the proposed work. This review constitutes the full extent of cultural resources investigations unless comment to this notice is received documenting that significant sites or properties exist which may be affected by this work, or that adequately documents that a potential exists for the location of significant sites or properties within the permit area. Copies of this notice are being sent to the State Historic Preservation Officer and the U.S. Department of the Interior, National Park Service, Division of Archeological Services.

Preliminary review of this application and the U.S. Department of the Interior List of Endangered and Threatened Wildlife and Plants indicates that the proposed activity may affect listed endangered or threatened species, and their critical habitat. Section 7 consultation will be initiated with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The proposal would impact approximately 4 acres of estuarine substrate utilized by various life stages of red drum, Spanish mackerel, and shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries.

Correspondence concerning this Public Notice should refer to Public Notice Number SAM-2008-1990-JBM and should be directed to the District Engineer, U.S. Army Engineer District, Mobile, Post Office Box 2288, Mobile, Alabama 36628-0001, Attention: Coastal Branch, with a copy to the Mississippi Department of Environmental Quality, Office of Pollution Control, Post Office Box 10385, Jackson, Mississippi 39289, and the Mississippi Department of Marine Resources, 1141 Bayview Avenue, Suite 101, Biloxi, Mississippi 39530, in time to be received within 21 days of the date of this public notice.

If you have any questions concerning this publication, you may contact this office, John B. McFadyen, telephone number (251) 690-3222, E-mail [john.b.mcfadyen@usace.army.mil](mailto:john.b.mcfadyen@usace.army.mil). Please refer to the above Public Notice number.

For additional information about our Regulatory Program, please visit our web site at [www.sam.usace.army.mil/RD/reg](http://www.sam.usace.army.mil/RD/reg), and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

USGS Ocean Springs, Mississippi, United States 01 Jul 1982

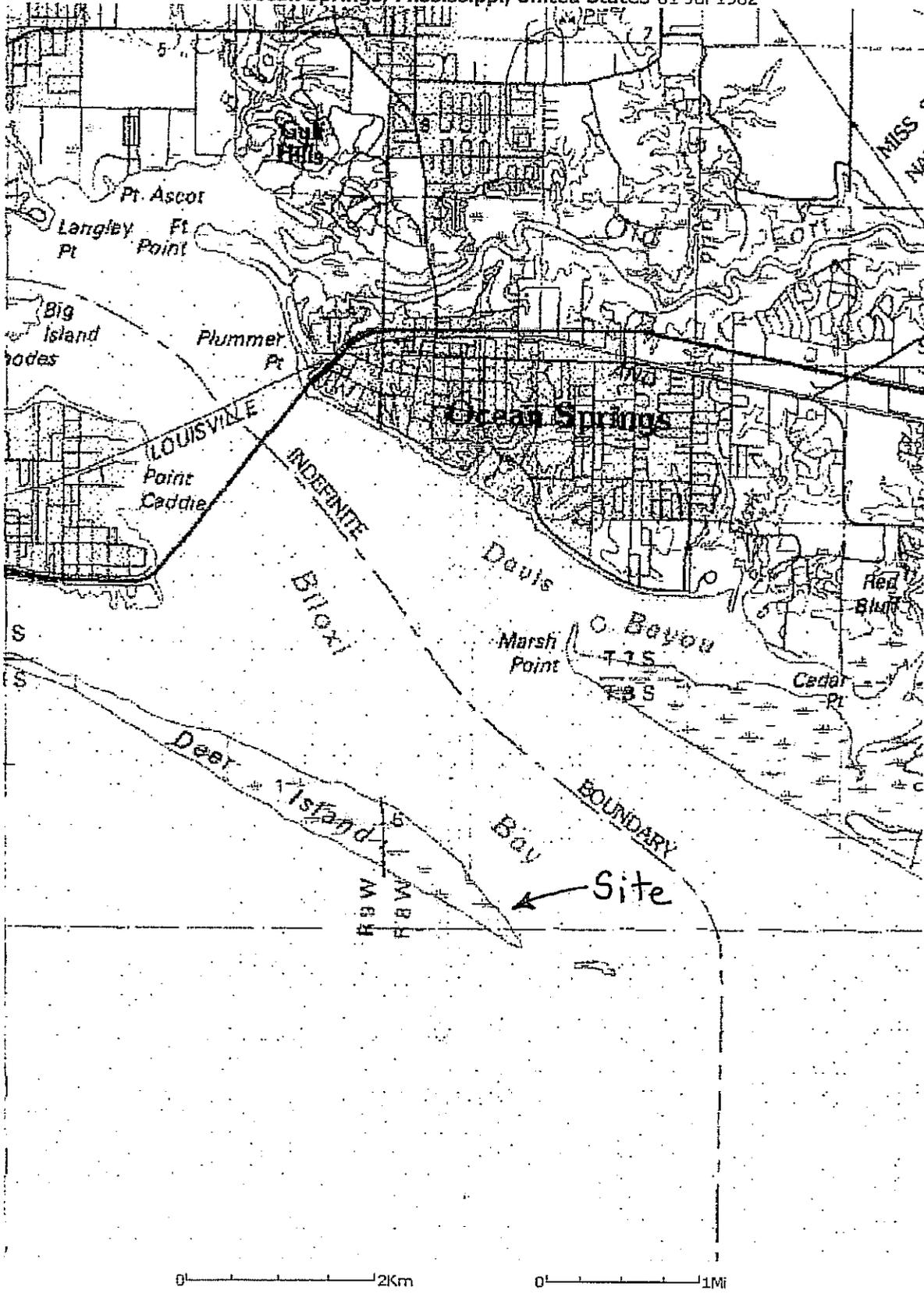
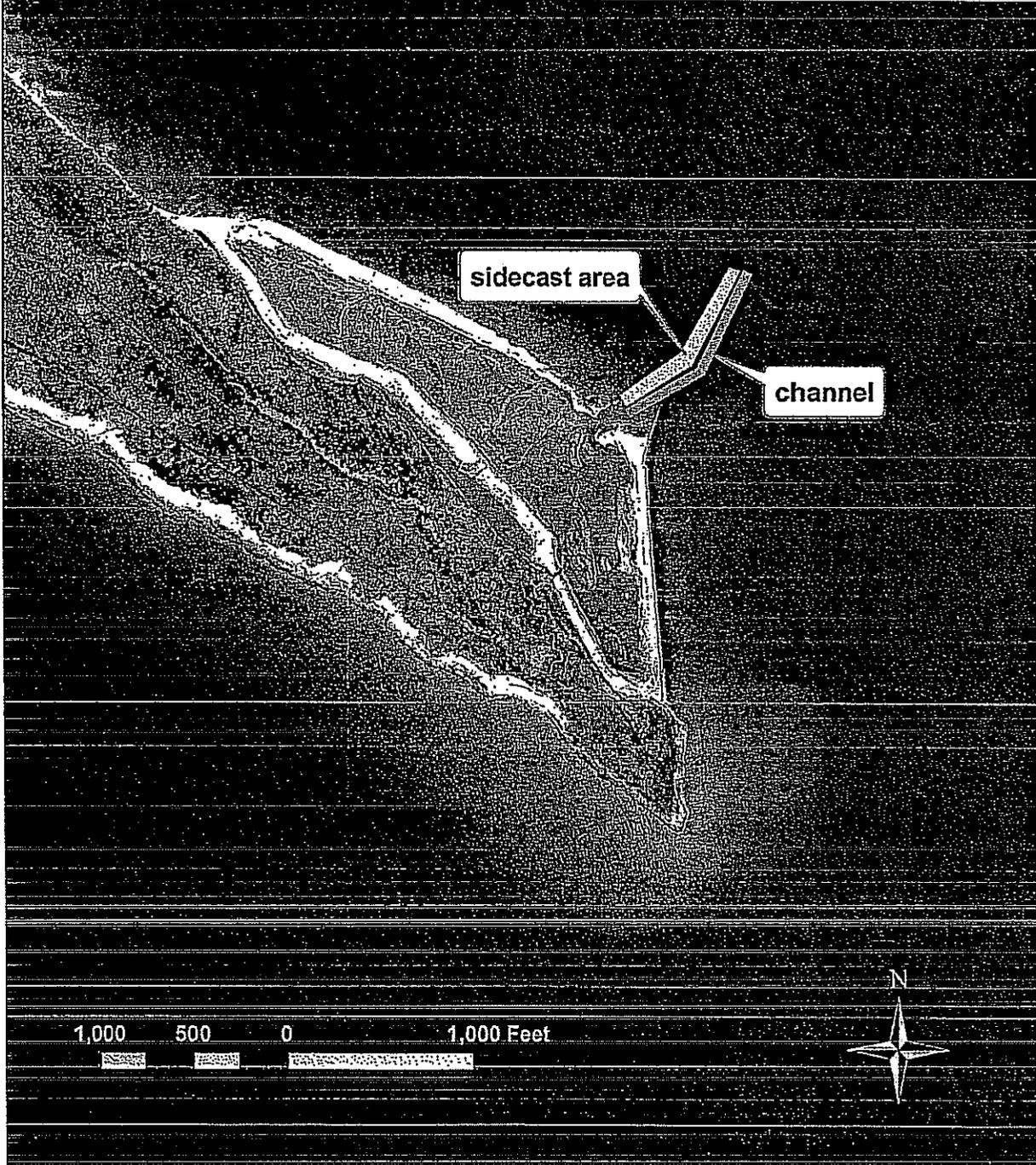


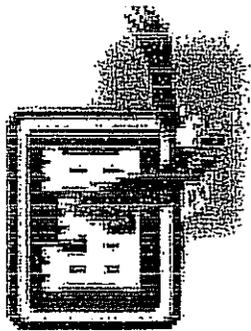
Image courtesy of the U.S. Geological Survey

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Vicinity Map

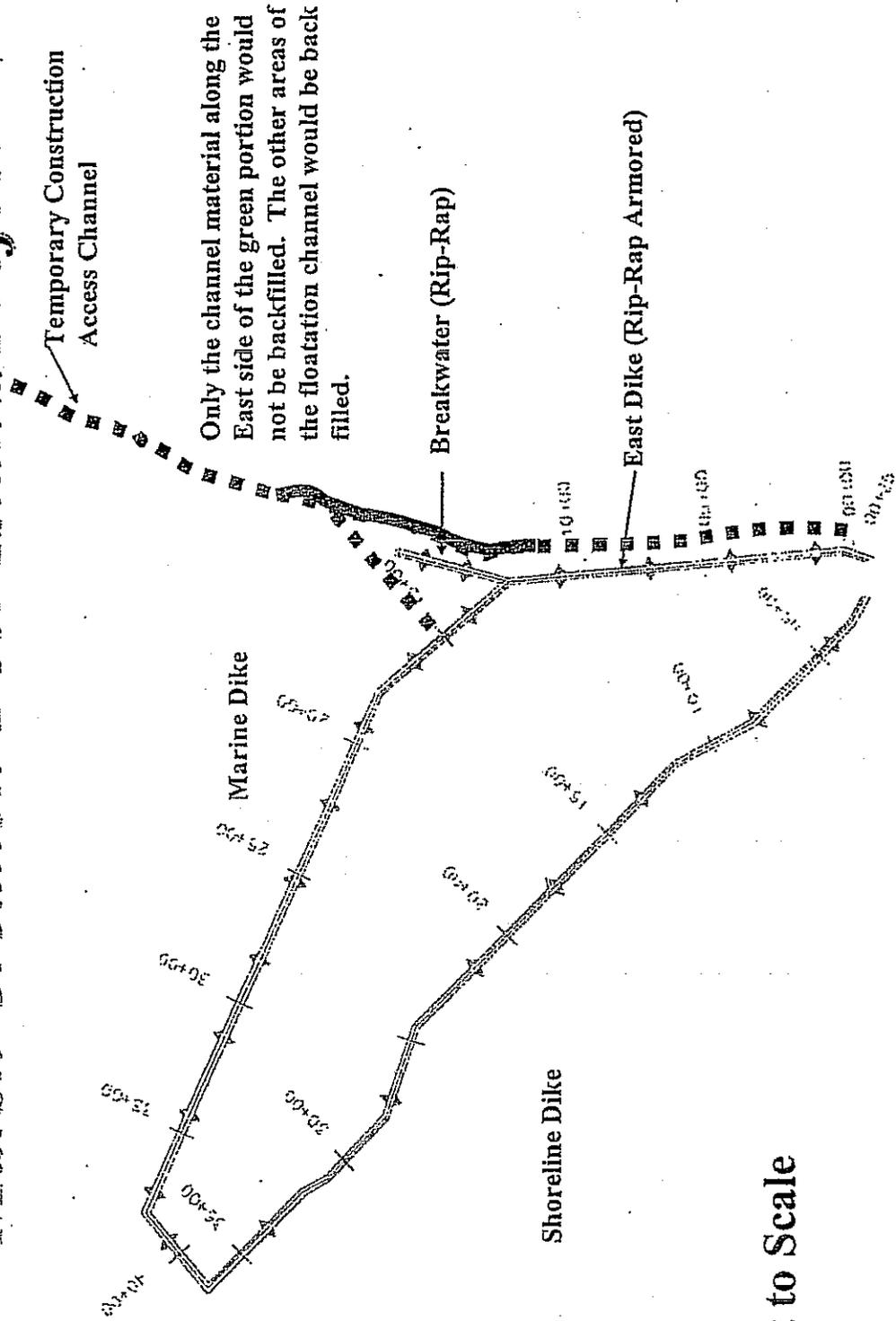
Deer Island Beneficial Use Project  
Channel Maintenance  
Proposed 12/15/08





U.S. Army Corps of Engineers  
Mobile District  
Irvington Site Office

# Marsh Creation-Deer Island Project



Drawing Not to Scale

Note 12/15/08: --

**environmental assessment Attachment "C".**

9/08/08

Draft conceptual plan for the "beneficial use" placement of dredged material at the Deer Island Marsh restoration project.

Background

- 1) The project was originally constructed in 2003 and consisted of a roughly triangular containment dike which was hardened outside its eastern face with rip-rap. The rip-rap was also extended into open water off the north end of the dike to form a protective jetty. See Figure 1.
- 2) Hydraulically dredged material was placed inside the dikes until sufficient elevations were reached to support marsh vegetation. *Spartina Patens*, *Spartina Alterniflora* and *Juncus Romerianus*, were the primary species planted. Before the initial plantings could establish themselves the project was impacted by a series of 5 tropical events beginning with Hurricane Ivan and culminating with Katrina (so far).
- 3) This series of storms removed material from both the containment dikes and the interior of the project so that elevations were no longer adequate to support marsh vegetation. It also created a large breach in the north portion of the dike. This has resulted in significant areas of shallow open water on the interior of the project. The Mississippi Department of Marine Resources (DMR) considers the overall apparent health of the remaining marsh vegetation to be excellent and areas with sufficient elevation have received additional plantings of *Spartina* spp., Sea Oats, Railroad Vine and other species which seem to be doing quite well following our brush with H. Gustav.
- 4) An attempt to place dredge material into the site several months ago failed because the only area with adequate water depths (approx 5-6 ft.) were along the outside of the east dike. This location proved to be too exposed to wind and waves with the predominant fetch being about twelve miles of open water toward west Horn Island.

Needs

- 1) DMR estimates that the project could accommodate up to 100,000 yards of material in order to restore design elevations for the project. We would also be interested in building fringing and interior upland areas to increase habitat diversity and improve the long term stability of the project so additional material could be accommodated in this way.
- 2) There are numerous and ongoing dredging operations carried out along the Mississippi Coast that could supply the needed (i.e. clean, proper grain size) material to rebuild this project. Many of these projects are being conducted with bucket dredges which produce a more highly consolidated product than hydraulic dredges. This less liquefied material could be placed inside the project without having to totally rebuild the dikes to their original 8 ft.+ elevations. The disadvantage of this more consolidated product is that some form of mechanical distribution will probably be required.
- 3) There are also increasing costs associated with disposal of dredge materials at upland sites as has been common in the past. A current estimate is that a gross additional cost of well over 20 dollars per yard is incurred if a barge bypasses Deer Island and makes the 5 hour round trip to an industrial site near Gulfport (which charges over \$4.00 per yard). The dredging contractor also spends another 5 or 6 hours unloading the material.

Although there will be some costs associated with using or at least accessing the Deer Island site, it should only be a fraction of the costs outlined above. These "costs of use" could include restoring the access channel as well as providing time, equipment and personnel to distribute dredge material throughout the interior portions of the site. Another potential but likely nominal cost could come from user fees assigned by the state of Mississippi although the policy aspects of a fee structure have not been determined at this time. Because of the potential for cost savings and the public's increasingly positive regard for beneficial use projects, DMR is receiving numerous requests to make this site available for placement of dredged material. The major impediment at this time is that the access channel originally used to construct the project has filled back in and needs to be reopened. So far it appears that the dredging contractors and /or their clients can pay for this channel maintenance and even distribution of material within the project site and still reduce overall disposal costs. This means that no State or Federal funding should be required for the project. Also, there is widespread and increasing public understanding that such beneficial use is a win/win proposition for coastal habitats. The dredging contractors and clients seem to fully understand this and appear enthusiastic to be part of this more positive approach.

#### Plan

- 1) Re-dredge portions of the channel originally used to construct the project that will allow access to the project along the west side of the jetty. This will allow material transfer in a more sheltered area. Dredging would most likely be done with a bucket and material would need to be side-cast. The water depth throughout the proposed work area is less than 6 feet with much of it less than 3 feet. The primary substrate is mud/silt. This makes the use of this area for forage by Gulf Sturgeon unlikely. Pending further assessment, a preliminary estimate of channel dimensions is approx. 6 ft. deep x 60 feet wide by 1000 ft. The side cast would cover approximately 4 acres.
- 2) Place approved material delivered via the restored, sheltered access channel to the interior of the project using a boom crane with a clamshell.
- 3) Distribute material within the project (dikes) that is outside the reach of the crane by gradually pushing material into the open water areas using tracked or other suitable equipment.

#### Goals

- 1) It is DMRs wish to restore a substantial amount elevation within the project using a higher proportion of sand if possible. Our informal research indicates that *Juncus* establishment and survival may be improved with sandier substrates.
- 2) A highly detailed, engineered approach is not a DMR priority at this point for several reasons:
  - dredge material elevations can be determined visually using existing healthy marsh areas as references
  - Our experience to date has been that sandy material will be redistributed during even minor storm events. These movements create channels, bars, pools and other features based on the actual hydrology of the site. We would prefer to place material as evenly and as far into the project as possible while carefully minimizing the level of equipment activity such as shaping, leveling, etc. This might include leaving piles of possibly several dozens yards volume standing in open water areas and waiting for them to be naturally distributed prior to planting. This primarily holistic approach should help minimize equipment impacts to established vegetation.